



MOOSE DEER.

*Schistoceros**magellanicus*

ARCTIC ZOOLOGY.

V O L. I.

CLASS I. QUADRUPEDS.

II. BIRDS.



L O N D O N :

PRINTED FOR ROBERT FAULDER, NEW BOND STREET.

M.DCC.XCII.

ARCTIC ZOOLOGY.

VOL. I.

CLASS I. QUADRUPEDS.
M. BIRDS.

PRINTED FOR LEXINGTON LANE, NEW BOND STREET.

MDCCCXIII.

DIRECTIONS FOR PLACING THE PLATES.

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DIRECTIONS FOR PLACING THE PLATE
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VOLUME
VOLUME

Three Pages. Head of the Milk not arrived at its
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CLASS H-BIRDS

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ARCTIC ZOOLOGY.

CLASS I. QUADRUPEDS.

DIV. I. HOOFED.

HIST. QUAD. GENUS II.

American Ox, *Hist. Quad.* p. 19. H.—*Smellie*, vi. 198.

I. OX.

I. BISON.

OX. With short, black, rounded horns; with a great space between their bases: on the shoulders a vast bunch, composed of a fleshy substance, much elevated: the fore part of the body thick and strong: the hind part slender and weak: tail a foot long, naked to the end, which is tufted: the legs short and thick.

The head and shoulders of the **BULL** are covered with very long flocks of reddish woolly hair, falling over the eyes and horns, leaving only the points of the latter to be seen: on the chin, and along the dewlaps, is a great length of shaggy hairs: the rest of the body during summer is naked, in winter is clothed equally in all parts. The **Cow** is lesser, and wants the shaggy coat, which gives the **Bull** so tremendous an aspect.

It grows to a great size, even to the weight of sixteen hundred or two thousand four hundred pounds*. The strongest man cannot lift the hide of one of these animals from the ground†.

SIZE.

* *Lawson*, 116.

† *Catesby*, ii. App.

The *Bison* and *Aurochs* of *Europe* is certainly the same species with this; the difference consists in the former being less shaggy, and the hair neither so soft nor woolly, nor the hind parts so weak. Both *European* and *American* kinds scent of musk.

WHERE
ANTIENLY
FOUND.

In antient times they were found in different parts of the old world, but went under different names; the *Bonafus* of *Aristotle*, the *Urus* of *Cæsar*, the *Bos ferus* of *Strabo*, the *Bison* of *Pliny*, and the *Biston* of *Oppian*, so called from its being found among the *Bistones*, a people of *Thrace*. According to these authorities, it was found in their days in *Media* and in *Pæonia*, a province of *Macedonia*; among the *Alps*, and in the great *Hercynian* forest, which extended from *Germany* even into *Sarmatia**. In later days a white species was a native of the *Scottish* mountains; it is now extinct in its savage state, but the offspring, sufficiently wild, is still to be seen in the parks of *Drumlanrig*, in the South of *Scotland*, and of *Cbillingham* Castle in *Northumberland* †.

WHERE AT
PRESENT.

EUROPE.
ASIA.

In these times it is found in very few places in a state of nature; it is, as far as we know, an inhabitant at present only of the forests of *Lithuania*, and among the *Carpathian* mountains, within the extent of the great *Hercynian* wood ‡, its antient haunts; and in *Asia*, among the vast mountains of *Caucasus*.

It is difficult to say in what manner these animals migrated originally from the old to the new world; it is most likely it was from the north of *Asia*, which in very antient times might have been stocked with them to its most extreme parts, notwithstanding they are now extinct. At that period there is a probability that the old and the new continents might have been united in the narrow chan-

* *Aristot. Hist. An.* lib. ii. c. 1.—*Cæsar Bell. Gall.* lib. vi.—*Plinii Hist. Nat.* lib. xv. c. 15.—*Oppian Cyneg.* ii. Lin. 160.

† *Br. Zool.* i. N° 3.—*Voy. Hebrides*, 124.—*Tour Scoll.* 1772, Part ii. p. 285.

‡ There is a very fine figure of the *European Bison* in Mr. *Ridinger's Jagdere Thiere*.

nel between *Tebutki nos* and the opposite headlands of *America*; and the many islands off of that promontory, with the *Aleutian* or *New Fox* Islands, somewhat more distant, stretching very near to *America*, may with great reason be supposed to be fragments of land which joined the two continents, and formed into their insular state by the mighty convulsion which divided *Asia* from *America*. *Spain* was probably thus disjoined from *Africa*; *Britain* from *France*; *Iceland* from *Greenland*; *Spitzbergen* from *Lapland*.

But that they passed from *Asia* to *America* is far the more probable, than that they stocked the new world from the side of *Europe*, not only on account of the present narrowness of the streight between the two continents, which gives a greater cause to suppose them to have been once joined; but that we are now arrived at a certainty, that these animals in antient days were natives of *Siberia*: the skulls, with the horns affixed, of a size far superior to any known at this time, have been found fossil not only on the banks of the *Ilga*, which falls into the *Lena*, but even in those of the *Anadyr*, the most eastern of the *Siberian* rivers, and which disembogues north of *Kamischatka* into those streights: similar skulls and horns have been discovered near *Dirschau*, in *Poland*, also of a gigantic magnitude; and in my opinion of the same species with the modern *Bisons* *.

In *America* these animals are found in the countries six hundred miles west of *Hudson's Bay*; this is their most northern residence. From thence they are met with in great droves as low as *Cibole* †, in lat. 33, a little north of *California*, and also in the province of *Mivera*, in *New Mexico* ‡; the species instantly ceases south of those

AMERICA.

* *Nov. Com. Petrop.* xvii. 460. tab. xi. xii.—I am sorry to dissent from my esteemed friend Doctor *Pallas*, who thinks them to be the horns of *Buffaloes*; which are longer, straiter, and angular.

† *Purchas*, iv. 1560, 1566.

‡ *Fernandez*, *Nov. Hisp.* x. c. 30.—*Hernandez*, 58.

countries. They inhabit *Canada*, to the west of the lakes; and in greater abundance in the rich *savannas* which border the river *Mississippi*, and the great rivers which fall into it from the west, in the upper *Louisiana* *. There they are seen feeding in herds innumerable, promiscuously with multitudes of stags and deer, during morning and evening; retiring in the sultry heats into the shade of tall reeds, which border the rivers of *America*.

TIMID.

They are exceedingly shy; and very fearful of man, unless they are wounded, when they pursue their enemy, and become very dangerous.

CHASE.

The chase of these animals is a favorite diversion of the *Indians*: it is effected in two ways; first, by shooting; when the marksman must take great care to go against the wind, for their smell is so exquisite that the moment they get scent of him they instantly retire with the utmost precipitation †. He aims at their shoulders, that they may drop at once, and not be irritated by an ineffectual wound. Provided the wind does not favor the beasts, they may be approached very near, being blinded by the hair which covers their eyes. The other method is performed by a great number of men, who divide and form a vast square: each band sets fire to the dry grass of the savanna where the herds are feeding; these animals have a great dread of fire, which they see approach on all sides; they retire from it to the center of the square ‡; the bands close, and kill them (pressed together in heaps) without the least hazard. It is pretended, that on every expedition of this nature, they kill fifteen hundred or two thousand beves.

ANOTHER.
METHOD.

The hunting-grounds are prescribed with great form, least the different bands should meet, and interfere in the diversion. Pe-

* *Du Pratz*, ii. 50. i. 116. 286.

† *Du Pratz*, i. 49. ii. 227.

‡ *Charlevoix*, *N. France*, v. 192.

nalties are enacted on such who infringe the regulations, as well as on those who quit their posts, and suffer the beasts to escape from the hollow squares; the punishments are, the stripping the delinquents, the taking away their arms (which is the greatest disgrace a savage can undergo), or lastly, the demolition of their cabins*.

The uses of these animals are various. The *Indians* often fix the hoofs of Buffaloes to their own feet, to deceive their enemies and avoid being tracked: and sometimes use for the same purpose the broad paws of the bear †. Powder-flasks are made of their horns. The skins are very valuable; in old times the *Indians* made of them the best targets ‡. When dressed, they form an excellent buff; the *Indians* dress them with the hair on, and cloath themselves with them; the *Europeans* of *Louisiana* use them for blankets, and find them light, warm, and soft. The flesh is a considerable article of food, and the bunch on the back is esteemed a very great delicacy. The Bulls become excessively fat, and yield great quantity of tallow, a hundred and fifty pounds weight has been got from a single beast ||, which forms a considerable matter of commerce. These over-fed animals usually become the prey of Wolves; for, by reason of their great unwieldiness, they cannot keep up with the herd.

The *Indians*, by a very bad policy, prefer the flesh of the Cows; which in time will destroy the species: they complain of the rankness of that of the Bulls; but *Du Pratz* thinks the last much more tender, and that the rankness might be prevented, by cutting off the testicles as soon as the beast is killed.

The hair or wool is spun into cloth, gloves, stockings, and garters, which are very strong, and look as well as those made of the

Uses.

SKIN.

TALLOW.

HAIR.

* *Charlevoix*, v. 192.† *Adair*, 385.‡ *Purchas*, iv. 1550.|| *Du Pratz*.

best

DEFENCE
AGAINST
WOLVES.

HARD TO BE
TAMED.

best sheeps wool; Governor *Pownall* assures us, that the most luxurious fabrick might be made of it*. The fleece of one of these animals has been found to weigh eight pounds.

Their sagacity in defending themselves against the attacks of Wolves is admirable: when they scent the approach of a drove of those ravenous creatures, the herd flings itself into the form of a circle: the weakest keep in the middle, the strongest are ranged on the outside, presenting to the enemy an impenetrable front of horns: should they be taken by surprize, and have recourse to flight, numbers of the fattest or the weakest are sure to perish †.

Attempts have been made to tame and domesticate the wild, by catching the calves and bringing them up with the common kind, in hopes of improving the breed. It has not yet been found to answer: notwithstanding they had the appearance for a time of having lost their savage nature, yet they always grew impatient of restraint, and, by reason of their great strength, would break down the strongest inclosure, and entice the tame cattle into the corn-fields. They have been known to engender together, and to breed; but I cannot learn whether the species was meliorated ‡ by the intercourse: probably perseverance in continuing the crosses is only wanted to effect their thorough domestication; as it is notorious that the *Bisons* of the old world were the original stock of all our tame cattle.

These were the only animals which had any affinity to the *European* cattle on the first discovery of the new world: before that period, it was in possession of neither Horse nor As, Cow nor Sheep, Hog, Goat, nor yet that faithful animal the Dog. Mankind were here in a state of nature; their own passions unsubdued, they never thought of conquering those of the brute creation,

* *Topog. Descr. N. Am.* 8.

† *Du Pratt*, i. 228.

‡ *Kalm*, i. 207.

and

and rendering them servient to their will. The few animals which they had congeous to those mentioned, might possibly by industry have been reclaimed. This animal might have been brought to all the uses of the *European* Cow; the *Pecari* might have been substituted for the Hog; the Fox or Wolf for the Dog: but the natives, living wholly by chase, were at war with the animal creation, and neglected the cultivation of any part, except the last, which was imperfectly tamed.

Such is the case even to the present hour; for neither the example of the *Europeans*, nor the visible advantages which result from an attention to that useful animal the Cow, can induce the *Indian* to pay any respect to it. He contemns every species of domestic labour, except what is necessary for forming a provision of bread. Every wigwam or village has its plantation of *Mayz*, or *Indian* corn, and on that is his great dependence, should the chase prove unsuccessful.

Domesticated cattle are capable of enduring very rigorous climates; Cows are kept at *Quickjock* in *Lecha Lapmark*, not far from the arctic circle; but they do not breed there, the succession being preserved by importation: yet in *Iceland*, a small portion of which is within the circle, cattle abound, and breed as in more southern latitudes: they are generally fed with hay, as in other places; but where there is scarcity of fodder, they are fed with the fish called the Sea-Wolf, and the heads and bones of Cod beaten small, and mixed with one quarter of chopped hay: the cattle are fond of it, and, what is wonderful, yield a considerable quantity of milk. It need not be said that the milk is bad.

Kamtschatka, like *America*, was in equal want of every domestic animal, except a wolf-like Dog, till the *Russians* of late years introduced the Cow and Horse. The colts and calves brought from the north into the rich pastures of *Kamtschatka*, where the grass is high,

grow

LAPMARK.

ICELAND.

KAMTSCHATKA.

grow to such a size, that no one would ever suspect them to be descended from the Ponies and Runts of the *Lena* *. The *Argali*, the flock of the tame Sheep, abounds in the mountains, but even to this time are only objects of chase. The natives are to this hour as uncultivated as the good *Evander* describes the primary natives of *Latium* to have been, before the introduction of arts and sciences.

Queis neque mos, neque cultus erat, nec jungere tauros,
Aut componere opes norant, aut parcere parto:
Sed rami atque asper victu venatus alebat.

No laws they know, no manners, nor the care
Of lab'ring Oxen, or the shining Share;
No arts of gain, nor what they gain'd to spare:
Their exercise the chase: the running flood
Supplied their thirst; the trees supplied their food.

}

Dryden.

2. MUSK.

Musk Ox, *Hist. Quad.* N° 9.

Le Bœuf musqué, de M. *Jeremie*, *Voy. au Nord*, iii. 314.—*Charlevoix*, *N. Franc.*, v. 194.—*LEV. MUS.*

BULL. With horns closely united at the base; bending inwards and downwards; turning outwards towards their ends, which taper to a point, and are very sharp: near the base are two feet in girth; are only two feet long measured along the curvature: weight of a pair, separated from the head, sometimes is sixty pounds †.

The hair is of a dusky red, extremely fine, and so long as to trail on the ground, and render the beast a seeming shapeless mass, with-

* *Pallas*, *Sp. Zool.* fasc. xi. 76.

† *M. Jeremie*, in *Voyages au Nord*, iii. 315.

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2 Musk Bull & Cow No. 2.

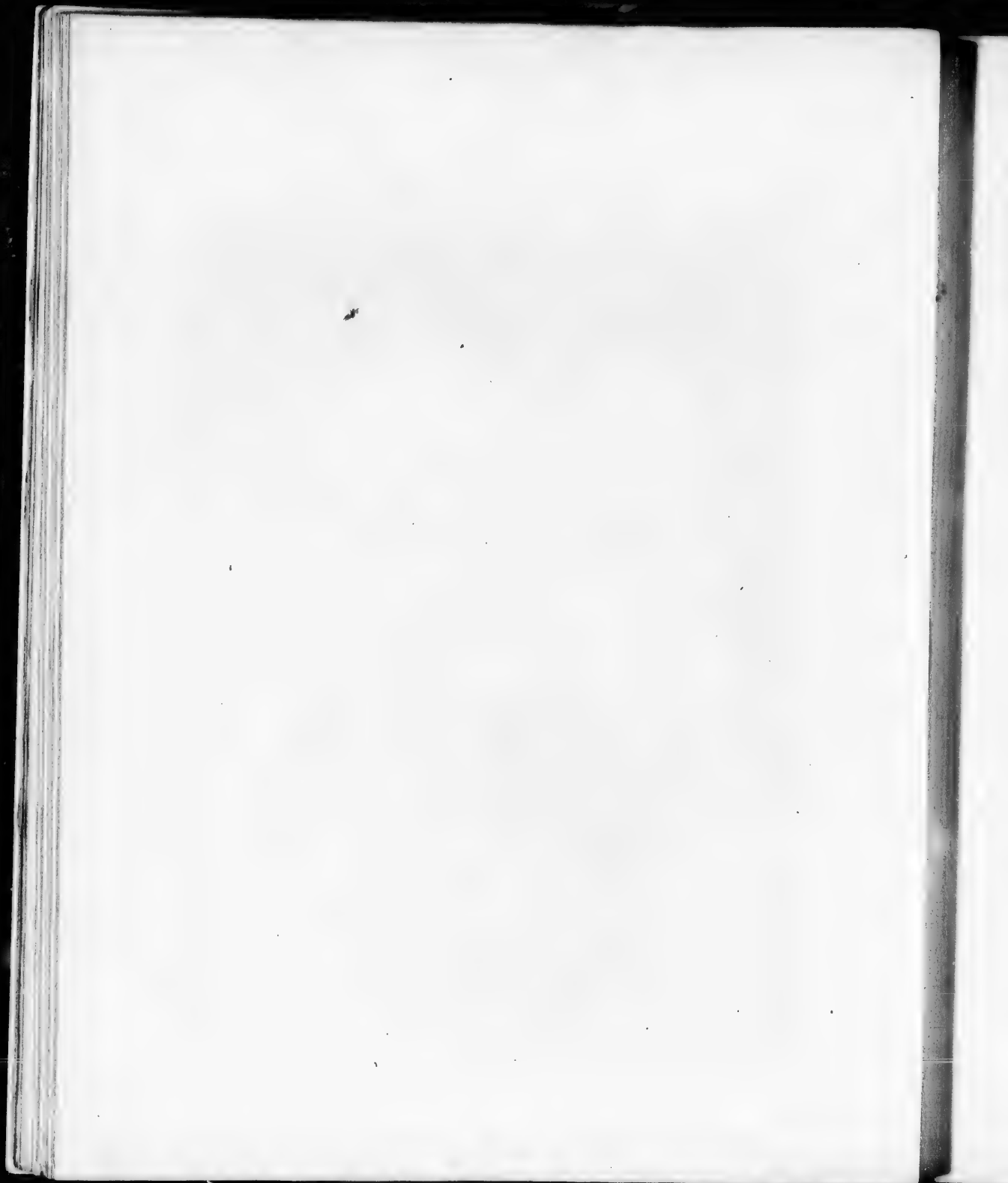
George H. Fisher

St. Louis, Mo.



III

8



our distinction of head or tail*: the legs and tail very short: the shoulders rise into a lump.

In size lower than a Deer, but larger as to belly and quarters †. I have only seen the head of this animal; the rest of the description is taken from the authorities referred to: but by the friendship of *Samuel Wegg*, Esq; I received last year a very complete skin of the cow of this species, of the age of three years, which enables me to give the following description:

SIZE.

Cow. The nostrils long and open: the two middle cutting teeth broad, and sharp-edged; the three on each side small, and truncated: under and upper lips covered with short white hairs on their fore part, and with pale brown on their sides: hair down the middle of the forehead long and erect; on the cheeks smooth and extremely long and pendulous, forming with the hair on the throat a long beard: the hair along the neck, sides, and rump hangs in the same manner, and almost touches the ground: from the hind part of the head to the shoulders is a bed of very long soft hair, forming an upright mane: in the old beasts the space between the shoulders rises into a hunch: the legs are very short, covered with smooth whitish hairs; those which encircle the hoofs very long, and of a pure white: hoofs short, broad, and black: the false hoofs large in proportion: tail only three inches long, a mere stump, covered with very long hairs, so as to be undistinguishable to the sight. Of the tail, the *Eskimaux* of the north-west side of the bay make a cap of a most horrible appearance; for the hairs fall all round their head, and cover their faces; yet it is of singular service in keeping off the Musketoes, which would otherwise be intolerable ‡.

Space between the horns nine inches: the horns are placed exactly on the sides of the head; are whitish; thirteen inches and a

HORNS.

* *M. Jeremie*, in *Voyages au Nord*. iii. 315.

† *Drage's Voy.* ii. 260.

‡ *Ellis's Voy.* 232.

EARS.

half long; eight inches and a half round at the base; of the same sort of curvature with those of the Bull: the ears are three inches long, quite erect; sharp-pointed, but dilate much in the middle; are thickly lined with hair of a dusky color, marked with a stripe of white.

COLOR.

The color of the hair black, except on these parts:—from the base of one horn to that of the other, is a bed of white and light rust-colored hair: the mane is dusky, tinged with red, which is continued in a narrow form to the middle of the back; on which is a large roundish bed of pure white, and the hairs in that space shorter than any of the rest, not exceeding three inches in length, and of a pale brown towards their roots.

HAIR.

The hairs are of two kinds, the longest measure seventeen inches; are very fine and glossy, and when examined appear quite flat: this is the black part, which cloaths most part of the animal.

The bed of hair between the horns, and that which runs along the top of the neck, is far finer and softer than any human hair, and appears quite round. The white bed is still finer, and approaches to the nature of wool.

WOOL.

Beneath every part of the hair grows in great plenty, and often in flocks, an ash-colored wool, most exquisitely fine, superior, I think, to any I have seen, and which might be very useful in manufactures if sufficient could be procured. I give full credit to *M. Jérémie*, who says, that he brought some of the wool to *France*, and got stockings made with it, more beautiful than those of silk*. The skin is thin.

SIZE.

The length of the whole hide, from nose to tail, is about six feet four inches: of the head alone fourteen inches. The legs could not be well measured, but were little more than a foot long.

* *Voy. au Nord*, iii. 314.

The situation of these animals is very local. They appear first in the tract between *Churchill* river and that of *Seals*, on the west side of *Hudson's Bay*. They are very numerous between the latitudes 66 and 73 north, which is as far as any tribes of *Indians* go. They live in herds of twenty or thirty. Mr. *Hearn* * has seen in the high latitudes several herds in one day's walk. They delight most in the rocky and barren mountains, and seldom frequent the woody parts of the country. They run nimbly, and are very active in climbing the rocks. The flesh tastes very strong of Musk, and the heart is so strongly infected as hardly to be eatable; but the former is very wholesome, having been found to restore speedily to health the sickly crew who made it their food †.

They are shot by the *Indians* for the sake of the meat and skins, the last from its warmth making excellent blankets. They are brought down on sledges to the forts annually during winter, with about three or four thousand weight of the flesh. These are called *Churchill* Buffaloes, to distinguish them from the last species, which are in *Hudson's Bay* called *Inland* Buffaloes, of which only the tongues are brought as presents ‡.

They are found also in the land of the *Cris* or *Cristinaux*, and the *Astinibouels*: again among the *Attimospiquay*, a nation supposed to inhabit about the head of the river of *Seals* §, probably not very remote from the South Sea. They are continued from these countries southward, as low as the provinces of *Quivera* and *Cibola*; for Father *Marco di Niza*, and *Gomara*, plainly describe both kinds ||.

* The gentleman who undertook, in 1770, 1771, 1772, the arduous journey to the *Icy Sea*, from *Prince of Wales's Fort*, *Hudson's Bay*. To him, through Mr. *Wegg's* interest, I am indebted for the skin and this information.

† *Drage's Voy.* ii. 260.

‡ *Mr. Graham's MS.*

§ *Dobbs's Hudson's Bay*, 19, 25.

|| *Purchas*, iv. 1561. v. 854.

Some of the skulls of this species have been discovered on the mossy plains near the mouth of the *Oby* in *Siberia*. It is not said how remote from the sea; if far, they probably in some period might have been common to the north of *Asia* and of *America*; if near the shore, it is possible that the carcases might have floated on the ice from *America* to the places where the remains might have been found *. Of this species was the head, and such were the means of conveyance, from the coast of *Hudson's* or *Baffin's*, mentioned by Mr. *Fabricius*, and which he saw so brought to *Greenland* †; for it could not have been, as he conjectures, the head of the *grunting Ox*, an animal found only in the very interior parts of northern *Asia*.

* *Pallas, in Nov. Com. Petrop. xvii. 601. tab. xvii.*

† *Faun. Groenl. 28.*

SHEEP.

S H E E P. *Hist. Quad.* GENUS III.

ARGALI: Wild Sheep, *Hist. Quad.* N° 11. H. p. 38.—*Smellie*, vi. 205.—
Lev. Mus.

THE Sheep, in its wild state, inhabits the north-east of *Asia*, beyond lake *Baikal*, between the *Onon* and *Argun*, to the height of latitude 60, on the east of the *Lena*, and from thence to *Kamtschatka*, and perhaps the *Kurile* islands. I dare not pronounce that they extend to the continent of *America*; yet I have received from Doctor *Pallas* a fringe of very fine twisted wool, which had ornamented a dress from the isle of *Kadjak*; and I have myself another piece from the habit of the *Americans* in latitude 50. The first was of a snowy whiteness, and of unparalleled fineness; the other as fine, but of a pale brown color: the first appeared to be the wool which grows intermixed with the hairs of the *Argali*; the last, that which is found beneath those of the Musk Ox. Each of these animals may exist on that side of the continent, notwithstanding they might have not fallen within the reach of the navigators in their short stay off the coast.

Certain quadrupeds of this genus were observed in *California* by the missionaries in 1697; one as large as a Calf of one or two years old,

old, with a head like a Stag, and horns like a Ram: the tail and hair speckled, and shorter than a Stag's. A second kind was larger, and varied in color; some being white, others black, and furnished with very good wool. The Fathers called both Sheep, from their great resemblance to them*. Either the *Americans* of latitude 50 are possessed of these animals, or may obtain the fleeces by commerce from the southern *Indians*.

CHASE IN
KAMTSCHATKA.

The *Argali* abound in *Kamtschatka*; they are the most useful of their animals, for they contribute to food and cloathing. The *Kamtschatkans* cloath themselves with the skins, and esteem the flesh, especially the fat, diet fit for the Gods. There is no labor which they will not undergo in the chase. They abandon their habitations, with all their family, in the spring, and continue the whole summer in the employ, amidst the rude mountains, fearless of the dreadful precipices, or of the *avalanches*, which often overwhelm the eager sportsmen.

These animals are shot with guns or with arrows; sometimes with cross-bows, which are placed in the paths, and discharged by means of a string whenever the *Argali* happens to tread on it. They are often chased with dogs, not that they are overtaken by them; but when they are driven to the lofty summits, they will often stand and look as if it were with contempt on the dogs below, which gives the hunter an opportunity of creeping within reach while they are so engaged; for they are the shyest of animals.

IN MONGOLIA.

The *Mongols* and *Tungusi* use a nobler species of chase: they collect together a vast multitude of horses and dogs, attempting to surround them on a sudden; for such is their swiftness and cunning, that if they perceive, either by sight or smell, the ap-

* *Ph. Transf. abr.* v. part ii. 195.

proach of the *chasseurs*, they instantly take to flight, and secure themselves on the lofty and inaccessible summits.

Domesticated Sheep will live even in the dreadful climate of *Greenland*. Mr. *Fabricius* * says, they are kept in many places. They are very numerous in *Iceland*. Before the epidemical disease which raged among them from 1740 to 1750, it was not uncommon for a single person to be possessed of a thousand or twelve hundred. They have upright ears, short tails, and often four or five horns †. They are sometimes kept in stables during winter, but usually left to take their chance abroad, when they commonly hide themselves in the caves of exhausted vulcanoes ‡. They are particularly fond of scurvy-grass, with which they grow so fat as to yield more than twenty pounds. The ewes give from two to six quarts of milk a day, of which butter and cheese is made. The wool is never shorn, but left on till the end of *May*, when it grows loose, and is stripped entirely off in one fleece; and a fine, short, and new wool appears to have grown beneath; this continues growing all summer, becomes smooth and glossy like the hair of Camels, but more shaggy §. With the wool the natives manufacture their cloth; and the flesh dried is an article of commerce.

In all parts of *European Russia* are found the common Sheep. Those of the very north, and of the adjacent *Finmark*, have short tails and upright ears, and wool almost as rude as the hair of Goats; but are seldom polyceratus. They sometimes breed twice in a year, and bring twins each time §.

In the *Asiatic* dominions of *Russia*, from the borders of *Russia* to those of *China*, is a most singular variety of Sheep, destitute of

SHEEP IN
ICELAND.

* *Faun. Groenl.* p. 29.

† *Smellie*, vi. 207, 219.

‡ *Horrebow*, 46.

§ *Troil's Voy.* 138.

§ *Leems*, 228.

tails,

tails, with rumps swelling into two great, naked, and smooth hemispheres of fat, which sometimes weigh forty pounds: their noses are arched: their ears pendulous: their throats wattled: their heads horned, and sometimes furnished with four horns. These are so abundant throughout *Tartary*, that a hundred and fifty thousand have been annually sold at the *Orenburg* fairs; and a far greater number at the fort *Troizkaja*, from whence they are driven for slaughter into different parts of *Russia* *. Sheep do not thrive in *Kamtschatka*, by reason of the wetness of the country.

Sheep abound in *New England* and its islands: the wool is short, and much coarser than that of *Great Britain*; possibly proper attention to the housing of the Sheep may in time improve the fleece; but the severity of the climate will ever remain an obstacle to its perfection. Manufactures of cloth have been established, and a tolerable cloth has been produced, but in quantities in no degree equal to the consumption of the country. *America* likewise wants downs; but by clearing the hills of trees, in a long series of years that defect may be alleviated. As we advance further south, the Sheep grow scarcer, worse, and the wool more hairy.

* *Pallas, Sp. Zool. fasc. xi. 63. tab. iv.*

G O A T. *Hist. Quad.* GENUS IV.

IBEX, *Hist. Quad.* No 13 *, is supposed to extend to the mountains of the eastern part of *Siberia*, beyond the *Lena*, and to be found within the government of *Kamtschatka*.—*LEV. MUS.*

THE tame Goat inhabits northern *Europe* as high as *Ward-buys*, in latitude 71, where it breeds, and runs out the whole year, only during winter has the protection of a hovel: it lives during that season on moss and bark of Fir-trees, and even of the logs cut for fuel. They are so prolific as to bring two, and even three, at a time. In *Norway* they thrive prodigiously, infomuch that 70 or 80,000 of raw skins are annually exported from *Bergen*, besides thousands that are sent abroad dressed.

Goats are also kept in *Iceland*, but not in numbers, by reason of the want of shrubs and trees for them to brouze. They have been introduced into *Greenland*, even to some advantage. Besides vegetable food, they will eat the *Arctic* trouts dried; and grow very fat †.

The climate of *South America* agrees so well with Goats, that they multiply amazingly: but they succeed so ill in *Canada*, that it is necessary to have new supplies to keep up the race ‡.

* *Smellie*, vi. 363.

† *Faun. Groenl.* p. 29.

‡ *De Buffon*, ix. 71.

D E E R. *Hist. Quad.* GENUS VII.

3. MOOSE.

Elk, Hist. Quad. N^o 42.—*Smellie*, vi. 315.—*LEV. MUS.*

DE E R. With horns with short beams, spreading into a broad palm, furnished on the outward side with sharp snags; the inner side plain: no brow antlers: small eyes: long slouching asinine ears: nostrils large: upper lip square, great, and hanging far over the lower; has a deep furrow in the middle, so as to appear almost bifid: under the throat a small excrescence, with a long tuft of coarse black hair pendent from it: neck shorter than the head; along the top an upright, short, thick, mane: withers elevated: tail short: legs long; the hind legs the shortest: hoofs much cloven.

COLOR.

Color of the mane a light brown; of the body in general a hoary brown: tail dusky above; white beneath. The vast size of the head, the shortness of the neck, and the length of the ears, give the beast a deformed and stupid look.

SIZE.

The greatest height of this animal, which I have heard of, is seventeen hands; the greatest weight 1229 pounds.

OF HORNS.

The largest horns I have seen are in the house of the *Hudson's Bay Company*; they weigh fifty-six pounds: their length is thirty-two inches; breadth of one of the palms thirteen inches and a half; space between point and point thirty-four.

The female is lesser than the male, and wants horns.

PLACE.

Inhabits the isle of *Cape Breton*, *Nova Scotia*, and the western side of the Bay of *Fundy*; *Canada*, and the country round the great lakes, almost as far south as the river *Ohio* *. These are its present

* *Du Pratz*, i. 301.

northern

northern and southern limits. In all ages it affected the cold and wooded regions in *Europe, Asia, and America*. They are found in all the woody tracts of the temperate parts of *Russia*, but not on the Arctic flats, nor yet in *Kamtschatka*. In *Siberia* they are of a monstrous size, particularly among the mountains.

The Elk and the Moose are the same species; the last derived from *Musu*, which in the *Algonkin* language signifies that animal *. The *English* used to call it the Black Moose, to distinguish it from the Stag, which they named the Grey Moose †. The *French* call it *L'Original*.

These animals reside amidst forests, for the convenience of browsing the boughs of trees, because they are prevented from grazing with any kind of ease, by reason of the shortness of their necks and length of their legs. They often have recourse to water-plants, which they can readily get at by wading. *M. Sarrafin* says, that they are very fond of the *anagyris fetida*, or stinking bean trefoil, and will uncover the snow with their feet in order to get at it.

In passing through the woods, they raise their heads to a horizontal position, to prevent their horns from being entangled in the branches.

They have a singular gait: their pace is a shambling trot, but they go with great swiftness. In their common walk they lift their feet very high, and will without any difficulty step over a gate five feet high.

They feed principally in the night. If they graze, it is always against an ascent; an advantage they use for the reason above assigned. They ruminate like the Ox.

They go to rut in autumn; are at that time very furious, seeking the female by swimming from isle to isle. They bring two young

NAME.

RESIDENCE AND
FOOD.

GAIT.

RUMINATE.

YOUNG.

* *Kalm*, i. 298. iii. 204.† *Mr. Dudley's Phil. Transf. Abridg.* vii. 447.

at a birth, in the month of *April*, which follow the dam a whole year. During the summer they keep in families. In deep snows they collect in numbers in the forests of pines, for protection from the inclemency of the weather under the shelter of those ever-greens.

They are very inoffensive, except in the rutting-season; or except they are wounded, when they will turn on the assailant, and attack him with their horns, or trample him to death beneath their great hoofs.

FLESH.

Their flesh is extremely sweet and nourishing. The *Indians* say, that they can travel three times as far after a meal of Moose, as after any other animal food. The tongues are excellent, but the nose is perfect marrow, and esteemed the greatest delicacy in all *Canada*.

SKIN.

The skin makes excellent buff; is strong, soft, and light. The *Indians* dress the hide, and, after soaking it for some time, stretch and render it supple by a lather of the brains in hot water. They not only make their snow-shoes of the skin, but after a chase form the canoes with it: they sew it neatly together, cover the seams with an unctuous earth, and embark in them with their spoils to return home*.

HAIR.

The hair on the neck, withers, and hams of a full-grown Elk is of much use in making mattresses and saddles; being by its great length well adapted for those purposes.

HORNS.

The palmated parts of the horns are farther excavated by the savages, and converted into ladles, which will hold a pint.

CHASE.

It is not strange that so useful an animal should be a principal object of chase. The savages perform it in different ways. The first, and the more simple, is before the lakes or rivers are frozen.

* *Le Hontan*, i. 59.

Multitudes assemble in their canoes, and form with them a vast crescent, each horn touching the shore. Another party perform their share of the chase among the woods; they surround an extensive tract, let loose their dogs, and press towards the water with loud cries. The animals, alarmed with the noise, fly before the hunters, and plunge into the lake, where they are killed by the persons in the canoes, prepared for their reception, with lances or clubs*.

The other method is more artful. The savages inclose a large space with stakes hedged with branches of trees, forming two sides of a triangle: the bottom opens into a second enclosure, completely triangular. At the opening are hung numbers of snares, made of slips of raw hides. The *Indians*, as before, assemble in great troops, and with all kinds of noises drive into the first enclosure not only the Mooses, but the other species of Deer which abound in that country: some, in forcing their way into the farthest triangle, are caught in the snares by the neck or horns; and those which escape the snares, and pass the little opening, find their fate from the arrows of the hunters, directed at them from all quarters†.

They are often killed with the gun. When they are first unharboured, they squat with their hind parts and make water, at which instant the sportsman fires; if he misses, the Moose sets off in a most rapid trot, making, like the Rein-deer, a prodigious rattling with its hoofs, and will run for twenty or thirty miles before it comes to bay or takes the water. But the usual time for this diversion is the winter. The hunters avoid entering on the chase till the sun is strong enough to melt the frozen crust with which the snow is covered, otherwise the animal can run over the firm

* *Charlevoix*, v. 188.

† *Charlevoix*, and *Le Hontan*, i. 65.

surface:

surface: they wait till it becomes soft enough to impede the flight of the Moose; which sinks up to the shoulders, flounders, and gets on with great difficulty. The sportsman pursues at his ease on his broad rackets, or snow-shoes, and makes a ready prey of the distressed animals:

As weak against the mountain heaps they push
 Their beating breast in vain, and piteous bray,
 He lays them quivering on th' ensanguin'd snows,
 And with loud shouts rejoicing bears them home.

THOMSON.

SUPERSTITIONS
 RELATING TO
 THE MOOSE.

The opinion of this animal's being subject to the epilepsy seems to have been universal, as well as the cure it finds by scratching its ear with the hind hoof till it draws blood. That hoof has been used in *Indian* medicine for the falling-sickness; they apply it to the heart of the afflicted, make him hold it in his left hand, and rub his ear with it. They use it also in the colick, pleurisy, vertigo, and purple fever; pulverising the hoof, and drinking it in water. The *Silgonkins* pretend that the flesh imparts the disease; but it is notorious that the hunters in a manner live on it with impunity.

The savages esteem the Moose a beast of good omen; and are persuaded that those who dream often of it may flatter themselves with long life*.

Their wild superstition hath figured to them a Moose of enormous size, which can wade with ease through eight feet depth of snow; which is invulnerable, and has an arm growing out of its shoulder, subservient to the purposes of the human: that it has a court of other Mooses, who at all times perform suit and service, according to his royal will†.

* *Charlevoix*, v. 186.

† The same.

FOSSIL HORNS
NOT BELONGING
TO THE MOOSE.

I lament that I am not able to discover the animal which owned the vast horns so often found in the bogs of *Ireland*, so long and so confidently attributed to the *Moose*. These have been found to be sometimes eight feet long, fourteen between tip and tip *, furnished with brow antlers, and weighing three hundred pounds: the whole skeleton is frequently found with them.

The fables delivered by *Jesselyn*, of the Moose being thirty-three hands, or twelve feet, high; and by *Le Hontan*, of its horns weighing between three and four hundred pounds; occasioned the naturalists of past times to call the fossil horns those of the Moose; and to flatter themselves that they had discovered the animal they belonged to: but recent discoveries evince the error. I once entertained hopes that the *Wasseffe* † of the *Hudson's Bay* Indians was the species; but by some late information I received from Mr. *Andrew Graham*, factor in the *Bay*, I find it to be no other than the common Moose.

The Elk has deserted the south of *Sweden* for a considerable time; still some are found in the forests near *Stockholm*, more or fewer, according to the year, for they are a sort of vagabond animals. The chase is entirely reserved for the nobility or gentry; and even they are prohibited from killing them before the 24th of *August*, under penalty of fifty *rix-dollars*, or 11*l.* 13*s.* 4*d.* The inhabitants dislike them greatly as neighbors, so much mischief do they do in the cultivated grounds. In *May*, *June*, and *July*, they are so bold, that the people are obliged to drive them away with blows of a stick: after that they are more difficult of approach. In *Femmland*, a province of *Norland*, their chase is free to every one. The largest Elk Mr. *Oedman* ever heard of, weighed eleven hundred and sixty pounds. A fawn of this species, taken very young,

* *Wright's Louisiana*, book iii. 20. tab. xxii.

† *Hist. Quad.* 45.

is capable of being easily tamed, and may be made as familiar as a dog; but the male becomes fierce when it is in heat, at least if it is not castrated. It will drink greedily of wine, if given to it; and when it gets drunk, it will snort it out of its nostrils. In a wild state, this animal feeds on the *lichens*, bark of the aspen poplar, the grey and the goat willows: when tame, it eats hay, and is very fond of peas straw; but the last must be given in small quantity, as it is apt to produce a fatal costiveness. When the female is closely pursued by the dogs, it will fling itself into the water with its fawn, and will continue swimming with it for many hours. She rarely brings more than one at a time. During winter, when the ground is covered with snow, the hunter cloaths himself with white linen, in order to render himself less visible.

4. REIN.

Hist. Quad. N° 43.—*Smellie*, vi. 316.—*Hackluyt*, iii. 114.—*LEV. MUS.*

DEER. With large but slender horns, bending forward; with brow antlers broad and palmated, sometimes three feet nine inches long; two feet six from tip to tip; weight, nine pounds twelve ounces avoirdupoise. The body is thick and square: the legs shorter than those of a Stag: the height of a full-grown Rein four feet six.

Color of the hair, at first shedding of the coat, of a brownish ash; afterwards changes to a hoary whiteness. The animal admirably guarded against the rigor of the climate by the great thickness of the hairs, which are so closely placed as totally to hide the skin, even if they are put aside with ever so much care.

Space round the eyes always black: nose, tail, and belly white: above the hoofs a white circle: hair along the lower side of the neck very long: tail short.

Hoofs,

Hoofs, and false hoofs, long and black; the last loosely hung, making a prodigious clatter when the animal runs.

The female is furnished with horns; but lesser, broader, and flatter, and with fewer branches than those of the male. She has six teats, but two are spurious and useless. They bring two young at a time.

The habitation of this Deer is still more limited than that of the former, confined to those parts where cold reigns with the utmost severity. Its most southern residence is the northern parts of *Canada*, bordering on the territories of *Hudson's Bay*. *Charlevoix* mentions a single instance of one wandering as far as the neighborhood of *Quebec* *. Their true place is the vast tract which surrounds the *Bay*. They are met with in *Labrador*, and again in *Newfoundland*, originally wafted thither across the narrow straits of *Bellefleur*, on islands of ice.

They spread northerly into *Greenland*, particularly on the western coast, about *Disko* †. I can find no traces (even traditional) of them in *Iceland*; which is the more surprising, as that island lies nearer to *Greenland* than *Newfoundland* does to the *Labrador* coast. It is probable that they were destroyed in very early times, when that island was so infinitely more populous than it is at present; and the farther migration of these animals prevented by the amazing aggregate of ice, which in later ages blocked up and even depopulated the eastern side of *Greenland*. No vegetable, not even mosses, is to be found on that extensive coast to support these hardy animals. Their last migration was from the western parts of *Greenland*, over unknown regions and fields of ice, to the inhospitable *Alps* of *Spitzbergen*. These, with the Polar Bear and Arctic Fox, form the short catalogue of its quadrupeds. They reside

FEMALE.

PLACE.

HUDSON'S-BAY.

LABRADOR.
NEWFOUNDLAND.

GREENLAND.

SPITZBERGEN.

* V. 191.

† *Egede*, 59. *Craniz*, i. 70.—The Canadians call it *Le Carib*.

there throughout the year; and by wondrous instinct discover their food, the *lichen rangiferinus*, beneath the snow, which they remove to great depths by means of their broad and spade-like antlers; and thus find subsistence thirteen degrees beyond the *Arctic circle* *.

KAMTSCHATKA.

To the western side of *Hudson's Bay* I trace the Rein as far as the nation called *Les Plat-côté des Chiens* †, the remotest we are acquainted with in the parallel of that latitude. Beyond, are lands unknown, till we arrive at that new-discovered chain of islands, which extends to within a small distance of *Asia*, or the northern cape of *Kamtschatka*, where I again recover these animals. There is reason to imagine that they are continued across the continent of *America*, but not on the islands which intervene between it and *Asia* ‡. But in the isle of *Kadjak*, and others of the easternmost *Fox islands*, the inhabitants have skins of them from the *American* continent, and border their bonnets with the white hairs of the domestic Rein-deers, stained red. They are found again in the countries which border on the *Icy sea* §; from which they retire, at approach of winter, towards the woods, to feed on the moss, not only that which grows on the ground, but the species pendulous from the trees. The whole north-east of *Siberia* abounds with them. They also are yet found wild in the *Uralian* mountains; along the river *Kama*, as far as *Kungus*; and about some snowy summits more south: and again on the high chain bordering on *Siberia* on the south, and about lake *Baikal*. Towards the west they are continued in the land of the *Samoieds*; and finally among the well-known *Laplanners*. Wild Rein-Deer are very scarce in the north of *Sweden*: the Wolves having almost extirpated this fine

SAMOIEDEA.

* *Marten's Spitzbergen*, 99. *Phipps's voy.* 185. † *Dobbs's Hudson's Bay*, 19.
 ‡ *Müller's voyages from Asia to America*, Preface xxv. § *Barentz voy.*

and

and useful animal. It is certain that horses cannot bear the smell of the *Rein*; they will, even on the first perception, become unmanageable, so that the riders cannot without difficulty keep them from running away with them.—I here transgress the limits of my plan, to give a slight comparative view of the progress of civilization among the inhabitants of these frozen climes.

With the *Laplanders* this animal is the substitute to the Horse, the Cow, the Sheep, and the Goat. Those most innocent of people have, even under their rigorous sky, some of the charms of a pastoral life. They have subdued these animals to various uses, and reclaimed them from their wild state. They attend their herds of Rein-deer, during summer, to the summits of their alps; to the sides of their clear lakes and streams, often bordered with native roses. They know the arts of the dairy, milk these their cattle, and make from it a rich cheese. They train them to the sledge, consider them as their chief treasure, and cherish them with the utmost tenderness.

LAPLANDERS,
THEIR USES OF IT.

The brutish *Samoied* considers them in no other view than as animals of draught, to convey them to the chase of the wild Reins; which they kill for the sake of the skins, either to cloath themselves, or to cover their tents. They know not the cleanly delicacy of the milk or cheese; but prefer for their repast the intestines of beasts, or the half-putrid flesh of a horse, ox, or sheep, which they find dead on the high road*.

SAMOIEDS.

The *Koreki*, a nation of *Kamtschatka*, may be placed on a level with the *Samoieds*: they keep immense herds of Reins; some of the richest, to the amount of ten or twenty thousand; yet so sordid are they as to eat none except such which they kill for the sake of the skins; an article of commerce with their neighbors the *Kamts-*

KOREKI.

* *Le Bruyn*, i. 7, 8.

chaskans : otherwise they content themselves with the flesh of those which die by disease or chance. They train them in the sledge, but neglect them for every domestic purpose*. Their historian says, they couple two to each carriage; and that the Deer will travel a hundred and fifty versts in a day, that is, a hundred and twelve *English* miles. They castrate the males by piercing the spermatic arteries, and tying the scrotum tight with a thong.

The inhabitants about the river *Kolyma* make use of the soft skins of the Rein-deer, dressed, for sails for a kind of boat called *Schitiki*, caulked with moss; and the boards as if sewed together with thongs; and the cordage made of slices of the skin of the Elk †.

ESKIMAUX
AND
GREENLANDERS.

The savage and uninformed *Eskimaux* and *Greenlanders*, who possess, amidst their snows, these beautiful animals, neglect not only the domestic uses, but even are ignorant of their advantage in the sledge. Their element is properly the water; their game the Seals. They seem to want powers to domesticate any animals unless Dogs. They are at enmity with all; consider them as an object of chase, and of no utility till deprived of life. The flesh of the Rein is the most coveted part of their food; they eat it raw, dressed, and dried and smoked with the snow lichen. The wearied hunters will drink the raw blood; but it is usually dressed with the berries of the heath: they eagerly devour the contents of the stomach, but use the intestines boiled. They are very fond of the fat, and will not lose the least bit ‡. The skin, sometimes a part of their cloathing, dressed with the hair on, is soft and pliant; it forms also the inner lining of their tents, and most excellent blankets. The tendons are their bow-strings, and when split are the threads with which they sew they jackets §.

* *Hist. Kamtschatka*, 226, 227.—The *Koreki* exchange their Deer with the neighboring nations for rich furs.

† *Muller's Summary*, &c. xviii.

‡ *Faun.*

Greenl. p. 28.

§ *Drage's Voy.* i. 25.

The

The *Greenlanders*, before they acquired the knowledge of the gun, caught them by what was called the *clapper-bunt* *. The women and children surrounded a large space, and, where people were wanting, set up poles capped with a turf in certain intervals, to terrify the animals; they then with great noise drove the Reins into the narrow defiles, where the men lay in wait and killed them with harpoons or darts. But they are now become very scarce.

On the contrary, they are found in the neighborhood of *Hudson's Bay* in most amazing numbers, columns of eight or ten thousand are seen annually passing from north to south in the months of *March* and *April* †, driven out of the woods by the musketoes, seeking refreshment on the shore, and a quiet place to drop their young. They go to rut in *September*, and the males soon after shed their horns; they are at that season very fat, but so rank and musky as not to be eatable. The females drop their young in *June*, in the most sequestered spots they can find; and then they likewise lose their horns. Beasts of prey follow the herds: first, the Wolves, who single out the stragglers (for they fear to attack the drove) detach and hunt them down: the Foxes attend at a distance, to pick up the offals left by the former. In autumn the Deer with the Fawns re-migrate northward.

The *Indians* are very attentive to their motions; for the Rein forms the chief part not only of their dress but food. They often kill multitudes for the sake of their tongues only; but generally they separate the flesh from the bones, and preserve it by drying it in the smoke: they also save the fat, and sell it to the *English* in bladders, who use it in frying instead of butter. The skins are also an article of commerce, and used in *London* by the Breeches-makers.

MULTITUDES
IN
HUDSON'S BAY.

MIGRATION.

USES.

* *Grantz*, i. 71.

† *Dobbs*, 19, 22.

CHASE.

The *Indians* shoot them in the winter. The *English* make hedges, with stakes and boughs of trees, along the woods, for five miles in length, leaving openings at proper intervals beset with snares, in which multitudes are taken.

The *Indians* also kill great numbers during the seasons of migration, watching in their canoes, and spearing them while passing over the rivers of the country, or from island to island; for they swim most admirably well.

A benevolent governor of *Iceland*, about twenty years ago, introduced the Rein Deer into that island; and I am informed by Mr. *Stanley*, that they increase and prosper greatly.

5. STAG.

Hist. Quad. N° 45.—Smellie, iv. 74.—LEV. Mus.

DEER. With long upright horns much branched: slender and sharp brow antlers: color a reddish brown: belly and lower side of the tail white: the horns often superior in size to those of the *European* Stags, some being above four feet high, and thirty pounds in weight.

Inhabits *Canada*, particularly the vast forests about the lakes; are seen in great numbers grazing with the Buffaloes on the rich savannas bordering on the *Mississipi*, the *Missouri*, and other *American* rivers; they are also found within our Colonies, but their numbers decrease as population gains ground. An *Indian* living in 1748 had killed many Stags on the spot where *Philadelphia* now stands*.

They feed eagerly on the broad-leaved *Kalmia*; yet that plant is a poison to all other horned animals; their intestines are found filled with it during winter. If their entrails are given to Dogs,

* *Kalm*, i. 336.

they

they become stupified, and as if drunk, and often are so ill as hardly to escape with life *.

Stags are also found in *Mexico*, where they are called *Aculiame*: they differ not from those of *Spain* in shape, size, or nature †. *South America* is destitute of these animals: they can bear the extremes of heat but not of cold. They are found neither in *Hudson's Bay*, *Kamtschatka*, nor in any country inhabited by the *Rein*—a line in a manner separates them.

Their skins are an article of commerce imported ‡ by the *Hudson's Bay* company; but brought from the distant parts far inland by the *Indians*, who bring them from the neighborhood of the lakes. In most parts of *North America* they are called the Grey Moose, and the Elk; this has given occasion to the mistaken notion of that great animal being found in *Virginia*, and other southern provinces.

The Stags of *America* grow very fat: their tallow is much esteemed for making of candles. The *Indians* shoot them. As they are very shy animals, the natives cover themselves with a hide, leaving the horns erect; under shelter of which they walk within reach of the herd. *De Brie*, in the xxvth plate of the History of *Florida*, gives a very curious representation of this artful method of chase, when it was visited by the *French* in 1564.

Stags are totally extirpated in *Russia*, but abound in the mountainous southern tract of *Siberia*, where they grow to a size far superior to what is known in *Europe*. The height of a grown Hind is four feet nine inches and a half, its length eight feet; that of its head one foot eight inches and a half.

It is positively said by *Stiernhook*, in his treatise *De jure Sueonum vetusto*, that in old time Stags were unknown in *Sweden*, and that

* *Kalm*, i. 338.

† *Hernandez*, *Nov. Hisp.* 325.

‡ In the sale

of 1764, 1,307 were entered.

they

VIRGINIAN DEER.

they were introduced there but a little before the time of *Gustavus Erickson*, who began his reign in 1521. Such Stags (says he, to distinguish them from the Rein-deer), which are now found in our southern provinces. Let me add, that it is certain that they have also long since reached *Norway*.

The species ceases in the north-eastern parts of *Siberia*, nor are any found in *Kamtschatka*.

6. VIRGINIAN.

Hist. Quad. N° 46.—LEV. MUS.

DEER. With round and slender horns, bending greatly forward; numerous branches on the interior sides: destitute of brow antlers: color of the body a cinereous brown: head of a deep brown: belly, sides, shoulders, and thighs, white, mottled with brown: tail ten inches long, of a dusky color: feet of a yellowish brown. Are not so well haunched as the *English* Buck, and are less active*.

PLACE.

Inhabits all the provinces south of *Canada*, but in greatest abundance in the southern; but especially the vast savannas contiguous to the *Mississipi*, and the great rivers which flow into it. They graze in herds innumerable, along with the Stags and Buffaloes. This species probably extends to *Guiana*, and is the *Baiou* of that country, which is said to be about the size of a *European* Buck, with short horns, bending at their ends†.

They are capable of being made tame; and when properly trained, are used by the *Indians* to decoy the wild Deer (especially

* The late ingenious Mr. *Ellis* shewed me a Bezoar found in one of these Deer, killed in *Georgia*. It was of a spheroid form, an inch and three quarters broad, half an inch thick in the middle; of a pale brown color; hard, smooth, and glossy.

† *Bancroft*.

in the rutting season) within shot. Both Bucks and Does herd from *September* to *March*; after that they separate, and the Does secrete themselves to bring forth, and are found with difficulty. The Bucks from this time keep separate, till the amorous season of *September* revolves. The Deer begin to feed as soon as night begins; and sometimes, in the rainy season, in the day: otherwise they seldom or never quit their haunts. An old *American* sportsman has remarked, that the Bucks will keep in the thickets for a year, or even two*.

These animals are very restless, and always in motion, coming and going continually†. Those which live near the shores are lean and bad, subject to worms in their heads and throats, generated from the eggs deposited in those parts‡. Those that frequent the hills and savannas are in better case, but the venison is dry. In hard winters they will feed on the long moss which hangs from the trees in the northern parts.

These and other cloven-footed quadrupeds of *America* are very fond of salt, and resort eagerly to the places impregnated with it. They are always seen in great numbers in the spots where the ground has been torn by torrents or other accidents, where they are seen licking the earth. Such spots are called *licking-places*. The hunters are sure of finding the game there; for, notwithstanding they are often disturbed, the Buffaloes and Deer are so passionately fond of the savory regale, as to bid defiance to all danger, and return in droves to these favorite haunts.

The skins are a great article of commerce, 25,027 being imported from *New-York* and *Pensylvania* in the sale of 1764.

The Deer are of the first importance to the Savages. The skins form the greatest branch of their traffick, by which they pro-

FOND OF SALT.

* Doctor Garden.

† Du Pratz, ii. 51.

‡ Lawson, 124.

cure from the colonists, by way of exchange, many of the articles of life. To all of them it is the principal food throughout the year; for by drying it over a gentle but clear fire, after cutting it into small pieces, it is not only capable of long preservation, but is very portable in their sudden excursions, especially when reduced to powder, which is frequently done.

Hunting is more than an amusement to these people. They give themselves up to it not only for the sake of subsistence, but to fit themselves for war, by habituating themselves to fatigue. A good huntsman is an able warrior. Those who fail in the sports of the field are never supposed to be capable of supporting the hardships of a campaign; they are degraded to ignoble offices, such as dressing the skins of Deer, and other employs allotted only to slaves and women*.

When a large party meditates a hunting-match, which is usually at the beginning of winter, they agree on a place of rendezvous, often five hundred miles distant from their homes, and a place, perhaps, that many of them had never been at. They have no other method of fixing on the spot than by pointing with their finger. The preference is given to the eldest, as the most experienced†.

When this matter is settled, they separate into small parties, travel and hunt for subsistence all the day, and rest at night; but the women have no certain resting-places. The Savages have their particular hunting countries; but if they invade the limits of those belonging to other nations, feuds ensue, fatal as those between *Percy* and *Douglas* in the famed *Chevy Chase*.

As soon as they arrive on the borders of the hunting country, (which they never fail doing to a man, be their respective routes

* *Larson*, 208.

† *Catesby*, App. xii.

ever so distant or so various) the captain of the band delineates on the bark of a tree his own figure, with a Rattlesnake twined round him with distended mouth; and in his hand a bloody tomahawk. By this he implies a destructive menace to any who are bold enough to invade their territories, or to interrupt their diversion*.

The chase is carried on in different ways. Some surprise the Deer by using the stale of the head, horns, and hide, in the manner before mentioned: but the general method is performed by the whole body. Several hundreds disperse in a line, encompassing a vast space of country, fire the woods, and drive the animals into some strait or peninsula, where they become an easy prey. The Deer alone are not the object; Foxes, Raccoons, Bears, and all beasts of fur, are thought worthy of attention, and articles of commerce with the *Europeans*.

The number of Deer destroyed in some parts of *America* is incredible; as is pretended, from an absurd idea which the Savages have, that the more they destroy, the more they shall find in succeeding years. Certain it is that multitudes are destroyed; the tongues only preserved, and the carcases left a prey to wild beasts. But the motive is much more political. The Savages well discern, that should they overstock the market, they would certainly be over-reached by the *European* dealers, who take care never to produce more goods than are barely sufficient for the demand of the season, establishing their prices according to the quantity of furs brought by the natives. The hunters live in their quarters with the utmost festivity, and indulgence in all the luxuries of the country. The chase rouses their appetites; they are perpetually eating, and will even rise to obey, at midnight, the calls of hunger. Their

* *Catesby*, App. ix.

viands are exquisite. Venison boiled with red pease; turkies barbecued and eaten with bears fat; fawns cut out of the does belly, and boiled in the native bag; fish, and crayfish, taken in the next stream; dried peaches, and other fruits, form the chief of their good living*. Much of this food is carminative: they give loose to the effects, and (reverse to the custom of the delicate *Arabs* †) laugh most heartily on the occasion ‡.

They bring along with them their wives and mistresses: not that they pay any great respect to the women. They make (like the *Cash-neshians*) errant pack-horses of them, loading them with provisions, or the skins of the chase; or making them provide fire-wood. Love is not the passion of a Savage, at least it is as brief with them as with the animals they pursue.

Mr. *Hutchins* was presented, by the *Weabipouk Indians*, with a Deer four feet eight inches long, and three feet two high. It was entirely white, except the back, which was mottled with brown. The fur was short and fine, like that of the Ermine. The *Indians*, in their manner of expression, said it came from a place where there was little or no day.

7. MEXICAN.

Mexican Roe? *Hist. Quad.* N° 52.—*Smellie*, iv. 136.

DEER. With horns near nine inches long, measuring by the curvature; and near nine inches between tip and tip, and two inches distant between the bases. About an inch and a half from the bottom is one sharp erect snag. This, and the lower parts of the horns, are very rough, strong, and scabrous. The upper parts bend forwards over the bases; are smooth, flatted, and broad, dividing into three sharp snags. Color of the hair like the Eu-

* *Lawson*, 207.

† *D'Arvieux's travels*, 147.

‡ *Lawson*, 207.

ropean Roe; but while young are rayed with white. In size somewhat superior to the *European* Roe.

Inhabits *Mexico* *; probably extends to the interior north-western parts of *America*, and may prove the *Scenoontung* or *Squinaton*, described as being less than a Buck and larger than a Roe, but very like it, and of an elegant form †

Hist. Quad. N° 51.—*Smellie*, iv. 120.—*LEV. MUS.*

7. ROE.

D E E R. With upright, round, rugged horns, trifurcated: hairs tawny at their ends, grey below: rump and under-side of the tail white. Length near four feet: tail only an inch.

According to *Charlevoix*, they are found in great numbers in *Canada*. He says they differ not from the *European* kind: are easily domesticated. The Does will retreat into the woods to bring forth, and return to their master with their young ‡. They extend far west §. If *Piso's* figure may be depended on, they are found in *Brazil* ||; are frequent in *Europe*; and inhabit as high as *Sweden* and *Norway* ¶: is unknown in *Russia*.

ROES are at present found scarcely any where but in the forest of *Smaland*, and that but rarely. The female brings only two at a time: the buck will defend itself with courage against the dogs, when driven to extremity. They never make a ring when they are hunted, but run strait forward, two or three *Swedish* miles, or twelve or eighteen *English*; and then return along their former track; but so fatigued as seldom to escape.

* *Hernandez*. † *Dobbs's Hudson's Bay*, 24. ‡ *Hist. Nouv. France*, v. 195.

§ *Dobbs's Hudson's Bay*, 24. || 97. ¶ *Faun. Suec.* N° 43, and *Pontop. Norway*, ii. 9.



A. TAIL-LESS ROE, *Hist. Quad.* p. 109.

In its stead is a larger variety: with horns like the last, and color the same; only a great bed of white covers the rump, and extends some way up the back: no tail, only a broad cutaneous excrescence around the anus.

Inhabits all the temperate parts of *Russia* and *Siberia*, and extends as far to the north as the *Elk*. Descends to the open plains in the winter. The *Tartars* call it *Saiga*: the *Russians* *Dikaja Roza*.

B. FALLOW-DEER, *Hist. Quad.* N° 44.

Are animals impatient of cold: are unknown in the *Russian* empire, except by importation: and are preserved in parks in *Sweden* *. The *English* translator of *Pontoppidan* mentions them (perhaps erroneously) among the deer of *Norway*.

FALLOW-DEER seem not to have been natives of *Sweden*; there are none in the forests, but which have escaped out of the king's parks: such as those near the capital; in the isle of *Oeland*; that of *Wesengore*, in lake *Wetter*; and at *Omberg*. Even Stags are rare in a state of nature, and those only in the forests of *Smaland*.

* *Du Pratz*, ii. 54.

M U S K. *Hist. Quad.* GENUS. X.

A. TIBET M. *Hist. Quad.* N° 54.—*Moschus, Pallas Sp. Zool. fasc. xiii. LEV. MUS.*

MUSK. With very sharp slender white tusks on each side of the upper jaw, hanging out far below the under jaw: ears rather large: neck thick: hair on the whole body long, upright, and thick set; each hair undulated; tips ferruginous; beneath them black; the bottoms cinereous: on each side of the front of the neck is a white line edged with black, meeting at the chest; another crosses that beneath the throat: limbs very slender, and of a full black: tail very short, and scarcely visible. The female wants the tusks and the musk-bag.

The musk-bag is placed on the belly, almost between the thighs. A full-grown male will yield a drachm and a half of musk; an old one two drachms.

The length of the male is two feet eleven; of the female, two feet three. The weight of a male from twenty-five to thirty pounds, Troy weight: of an old female, from thirty to thirty-five; but some young ones do not exceed eighteen.

Inhabits *Asia*, from lat. 20 to 60, or from the kingdoms of *Laos* and *Tong-King*, between *India* and *China*, and through the kingdom of *Tibet** as high as *Mangasea*. The river *Jenesei* is its western boundary, and it extends eastward as far as lake *Baikal*, and about the rivers *Lena* and *Witim*; but gradually narrows the extent of its residence as it approaches the tropic. Lives on the highest and rudest mountains, amidst the snows, or in the fir-woods which lie

SIZE.

PLACE.

* Correct in p. 113, *Hist. Quad.* 9. 44 or 45, read 20.

between

between them: goes usually solitary, except in autumn, when they collect in flocks to change their place: are excessively active, and take amazing leaps over the tremendous chasms of their *alps*, or from rock to rock: tread so light on the snow, with their true and false hoofs extended, as scarcely to leave a mark; while the dogs which pursue them sink in, and are forced to desist from the chase: are so fond of liberty as never to be kept alive in captivity. They feed on *lichens*, *arbutus*, *rhododendron*, and *whortleberry*-plants. Their chase is most laborious: they are taken in snares; or shot by cross-bows placed in their tracks, with a string from the trigger for them to tread on and discharge. The *Tungusi* shoot them with bows and arrows. The skins are used for bonnets and winter dresses. The *Russians* often scrape off the hair, and have a way of preparing them for summer cloathing, so as to become as soft and shining as silk.

CAMEL.

The two other hoofed animals of the north of *Asia*, the Two-bunched Camel, and the Wild Boar, do not reach as high as lat. 60: the first is found in great troops about lake *Baikal*, as far as lat. 56 or 57; but if brought as high as *Jakutsk*, beyond lat. 60, perish with cold*. The Wild Boar is common in all the reedy marshes of *Tartary* and *Siberia*, and the mountainous forests about lake *Baikal*, almost to lat. 55; but none in the north-eastern extremity of *Siberia*.

WILD BOAR.

* Zimmerman, 357.

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D I V. II.
DIGITATED QUADRUPEDS.
S E C T. I. With CANINE TEETH.

VOL. I.

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D I V. II. Digitated Quadrupeds.

S E C T. I. With CANINE TEETH.

Rapacious, Carnivorous.

DOG.

H I S T. Q U A D. G E N U S XVII.

9. WOLF.

Hist. Quad. N° 137.—*Smellie*, iv. 196.—*LEV. MUS.*

DOG. With a long head : pointed nose : ears sharp and erect : legs long : tail bushy, bending down : hair pretty long. Color usually of a pale brown, mixed with dull yellow and black.

Inhabits the interior countries south of *Hudson's Bay* ; and from thence all *America*, as low as *Florida*. There are two varieties, a greater and a lesser. The first usually confines itself to the colder parts. The latter is not above fifteen inches high *. In the more uninhabited parts of the country, they go in great droves, and hunt the deer like a pack of hounds, and make a hideous noise. They will attack the Buffalo ; but only venture on the stragglers. In the unfrequented parts of *America* are very tame, and will come near the few habitations in hopes of finding something to eat. They are often so very poor and hungry, for want of prey, as to go into a swamp and fill themselves with mud, which they will disgorge as soon as they can get any food.

COLOR.

The Wolves towards *Hudson's Bay* are of different colors ; grey and white ; and some black and white, the black hairs being mixed with the white chiefly along the back. In *Canada* they have been

* *Du Rozet*, ii. 54.

found

found entirely black *. They are taken in the northern parts in log-traps, or by spring-guns; their skins being an article of commerce.

In the LEVERIAN museum is the head and scull of a wolf: dusky and brown, formed by the natives into a helmet. The protection of the head was the natural and first thought of mankind; and the spoils of beasts were the first things that offered. *Hercules* seized on the skin of the Lion: the *Americans*, and ancient *Latians* that of the Wolf.

Fulvosque Lupi de pelle galeros
Tegmen habet capiti.

Wolves are now so rare in the populated parts of *America*, that the inhabitants leave their sheep the whole night unguarded: yet the governments of *Pennsylvania* and *New Jersey* did some years ago allow a reward of twenty shillings, and the last even thirty shillings, for the killing of every Wolf. Tradition informed them what a scourge those animals had been to the colonies; so they wisely determined to prevent the like evil. In their infant state, wolves came down in multitudes from the mountains, often attracted by the smell of the corpses of hundreds of *Indians* who died of the small-pox, brought among them by the *Europeans*: but the animals did not confine their insults to the dead, but even devoured in their huts the sick and dying Savages †.

The Wolf is capable of being in some degree tamed and domesticated ‡. It was, at the first arrival of the *Europeans*, and is still in many places, the Dog of the *Americans* §. It still betrays its savage descent, by uttering only a howl instead of the significant bark of the genuine Dog. This half-reclaimed breed wants the

Dog.

* *Smellie*, iv. 212.

† *Kalm*, i. 285.

‡ The same, 286.

—*Larvén*, 119.

§ *Smith's Hist. Virginia*, 27.—*Cranitz Greenland*, i. 74.

fagacity of our faithful attendant; and is of little farther use in the chase, than in frightening the wild beasts into the snares or traps.

The *Kamtchatkans*, *Esquimaux*, and *Greenlanders*, strangers to the softer virtues, treat these poor animals with great neglect. The former, during summer, the season in which they are useless, turn them loose to provide for themselves; and recall them in *October* into their usual confinement and labor: from that time till spring they are fed with fish-bones and *opana*, i. e. putrid fish preserved in pits, and served up to them mixed with hot water. Those used for draught are castrated; and four, yoked to the carriage, will draw five poods, or a hundred and ninety *English* pounds, besides the driver; and thus loaden, will travel thirty versts, or twenty miles, a day; or if unloaden, on hardened snow, on sliders of bone, a hundred and fifty versts, or a hundred *English* miles*.

It is pretty certain that the *Kamtchatkan* Dogs are of wolfish descent; for Wolves abound in that country, in all parts of *Siberia*, and even under the *Arctic* circle. If their master is flung out of his sledge, they want the affectionate fidelity of the *European* kind, and leave him to follow, never stopping till the sledge is overturned, or else stopped by some impediment†. I am also strengthened in my opinion by the strong rage they have for the pursuit of deer, if on the journey they cross‡ the scent; when the master finds it very difficult to make them pursue their way.

The great traveller of the thirteenth century, *Marco Polo*, had knowledge of this species of conveyance from the merchants who went far north to traffic for the precious furs. He describes the

* *Hist. Kamtschatka*, 107. 197.

† The same, 107.

‡ The same.—There is a variety of black wolves in the *Vekroturian* mountains. The she-wolves have been successfully coupled with dogs in some noblemen's parks about *Moscow*.

sledges;

sledges; adds, that they were drawn by six great dogs; and that they changed them and the sledges on the road, as we do at present in going post*.

The *Kamtshatkans* make use of the skins of dogs for cloathing, and the long hair for ornament: some nations are fond of them as a food; and reckon a fat dog a great delicacy†. Both the *Asiatic* and *American* Savages use these animals in sacrifices to their gods‡, to bespeak favor, or avert evil. When the *Koreki* dread any infection, they kill a dog, wind the intestines round two poles, and pass between them.

The *Greenlanders* are not better masters. They leave their dogs to feed on mussels or berries; unless in a great capture of seals, when they treat them with the blood and garbage. These people also sometimes eat their dogs: use the skins for coverlets, for cloathing, or to border and seam their habits: and their best thread is made of the guts.

GREENLAND.

The Dogs in general are large; and, in the frigid parts at least, have the appearance of Wolves: are usually white, with a black face; sometimes varied with black and white, sometimes all white; rarely brown, or all black: have sharp noses, thick hair, and short ears: and seldom bark; but set up a sort of growl, or savage howl. They sleep abroad; and make a lodge in the snow, lying with only their noses out. They swim most excellently: and will hunt, in packs, the ptarmigan, arctic fox, polar bear, and seals lying on the ice. The natives sometimes use them in the chase of the bear. They are excessively fierce; and, like wolves, instantly fly on the few domestic animals introduced into *Greenland*. They will fight among themselves, even to death. Canine mad-

* In *Bergeron*, 160.
same, *Drage*, i. 216.

† *Hist. Kamtschatka*, 231.—The *Americans* do the
‡ *Hist. Kamtsch.* 226.—*Drage*, ii. 41.

neis is unknown in *Greenland**. They are to the natives in the place of horses: the *Greenlanders* fasten to their sledges from four to ten; and thus make their visits in savage state, or bring home the animals they have killed. *Egede* says that they will travel over the ice fifteen *German* miles in a day, or sixty *English*, with sledges laden with their masters and five or six large seals†.

ICELAND.

Those of the neighboring island of *Iceland* have a great resemblance to them. As to those of *Newfoundland*, it is not certain that there is any distinct breed: most of them are curs, with a cross of the mastiff: some will, and others will not, take the water, absolutely refusing to go in. The country was found uninhabited, which makes it more probable that they were introduced by the *Europeans*; who use them, as the factory does in *Hudson's Bay*, to draw firing from the woods to the forts.

The Savages who trade to *Hudson's Bay* make use of the wolfish kind to draw their furs.

It is singular, that the race of *European* Dogs shew as strong an antipathy to this *American* species, as they do to the Wolf itself. They never meet with them, but they shew all possible signs of dislike, and will fall on and worry them; while the wolfish breed, with every mark of timidity, puts its tail between its legs, and runs from the rage of the others. This aversion to the Wolf is natural to all genuine Dogs: for it is well known that a whelp, which has never seen a wolf, will at first sight tremble, and run to its master for protection: an old dog will instantly attack it.

I shall conclude this article with an abstract of a letter from Dr. *Pallas*, dated *October* 5th, 1781; in which he gives the following confirmation of the mixed breed of these animals and Dogs.

"I have seen at *Moscow* about twenty spurious animals from
"dogs and black wolves. They are for the most part like wolves,

* *Faun. Greenl.* p. 19.

† *Egede*, 63.—*Crantz*, i. 74.

"except

"except that some carry their tails higher, and have a kind of coarse barking. They multiply among themselves: and some of the whelps are greyish, rusty, or even of the whitish hue of the Arctic wolves: and one of those I saw, in shape, tail, and hair, and even in barking, so like a cur, that, was it not for his head and ears, his ill-natured look, and fearfulness at the approach of man, I should hardly have believed that it was of the same breed."

In many parts of *Sweden* the number of Wolves has been considerably diminished by placing poisoned carcases in their way: but in other places they are found in great multitudes. Hunger sometimes compels them to eat *lichens*; those vegetables were found in the body of one killed by a soldier, but it was so weak, that it could scarcely move. It probably had fed on the *lichen vulpinus*, which is a known poison to these animals.

Madness, in certain years, is very apt to seize the Wolf. The consequences are often very melancholy. Mad Wolves will bite Hogs and Dogs, and the last again, the human species. In a single parish fourteen persons were victims to this dreadful malady. The symptoms are the same with those attendant on the bite of a mad dog. Fury sparkles in their eyes; a glutinous saliva distils from their mouths; they carry their tails low, and bite indifferently men and beasts. It is remarkable that this disease happens in the depth of winter, so can never be attributed to the rage of the dog-days.

Often, towards spring, Wolves get upon the ice of the sea, to prey on the young Seals, which they catch asleep: but this repast often proves fatal to them; for the ice, detached from the shore, carries them to a great distance from land, before they are sensible of it. In some years a large district is by this means delivered from these pernicious beasts; which are heard howling in a most dreadful manner, far in the sea.

When

When Wolves come to make their attack on cattle, they never fail attempting to frighten away the men by their cries; but the found of the horn makes them fly like lightning.

10. ARCTIC.

Arctic Fox, *Hist. Quad.* N° —LEV. MUS.

DOG. With a sharp nose: ears almost hid in the fur, short and rounded: hair long, soft, and silky: legs short: toes covered above and below with very thick and soft fur: tail shorter than that of the common Fox, and more bushy.

Inferior in size to the common Fox: color a blueish-grey, and sometimes white. The young, before they come to maturity, dusky. The hair, as usual in cold regions, grows much thicker and longer in winter than summer.

These animals are found only in the Arctic regions, a few degrees within and without the Polar circle. They inhabit *Spitzbergen*, *Greenland*, and *Iceland* *: are only migratory in *Hudson's Bay*, once in four or five years †: are found again in *Bering's* and ‡ *Copper Isle*, next to it; but in none beyond: in *Kamtschatka*, and all the countries bordering on the frozen sea, which seems their great residence; comprehending a woodless tract of heath land, generally from 70 to 65 degrees lat. They abound in *Nova Zembla* ||: are found in *Cherry island*, midway between *Finmark* and *Spitzbergen* §, to which they must have been brought on islands of ice; for it lies above four degrees north of the first, and three south of the last: and lastly, in the bare mountains between *Lapland* and *Norway*. When the Arctic Fox has been in pursuit of the wandering *Lemmus*, p. 136. *Art. Zool.* it sometimes loses its way home, and has been taken in places far from its

* *Egede*, 62.—*Marten's Spitzb.* 100.—*Horrebow's Iceland*, 43. † *Mr. Graham*.
‡ *Müller's Col.* 179. 53. || *Heemskirk's Voy.* 34. § *Purchas*, iii. 559.

natural haunts. The late Mr. *Kalm* has left an instance of one being taken in *Westrogothia*. Professor *Retzius* favored me with an account of one shot near to *Lund*, in lat. 55. 42.

They are the hardiest of animals, and even in *Spitzbergen* and *Nova Zembla* prowl out for prey during the severity of winter. They live on the young wild geese, and all kind of water-fowl; on their eggs; on hares, or any lesser animals; and in *Greenland*, (through necessity) on berries, shell-fish, or whatsoever the sea throws up. But in the north of *Asia*, and in *Lapland*, their principal food is the *Lemings* *. The Arctic foxes of those countries are as migratory as those little animals; and when the last make their great migrations, the latter pursue them in vast troops. But such removals are not only uncertain, but long: dependent on those of the *Leming*. The Foxes will at times desert their native countries for three or four years, probably as long as they can find any prey. The people of *Jenisea* imagine, that the wanderers from their parts go to the banks of the *Oby*.

Those found on *Bering's* and *Copper Isles* were probably brought from the *Asiatic* side on floating ice: *Steller* having seen in the remoter islands only the black and brown foxes: and the same only on the continent of *America*. They burrow in the earth, and form holes many feet in length; strewing the bottom with moss. But in *Spitzbergen* and *Greenland*, where the ground is eternally frozen, they live in the cliffs of rocks: two or three inhabit the same hole. They swim well, and often cross from island to island in search of prey. They are in heat about *Lady-day*; and during that time continue in the open air: after that, retreat to their earths. Like

* Of which I apprehend there are two species—the *Lapland*, *Hist. Quad.* N° 317, and the *Mus Migratorius* of *Pallas*, or *Yaik Rat*, *Hist. Quad.* N° 326. which inhabits the country near the *Yaik*.

dogs, continue united in copulation: bark like them: for which reason the *Russians* call them *Pefzti*. They couple in *Greenland* in *March*, and again in *May*; and bring forth in *April* and in *June**.

They are tame and inoffensive animals; and so simple, that there are instances of their standing by when the trap was baiting, and instantly after putting their heads into it. They are killed for the sake of their skins, both in *Asia* and *Hudson's Bay*: the fur is light and warm, but not durable. Mr. *Grabam* informed me, that they have appeared in such numbers about the fort, that he has taken, in different ways, four hundred from *December* to *March*. He likewise assured me, that the tips of their tails are always black; those of the common foxes always white: and that he never could trace the breeding-places of the former.

The *Greenlanders* take them either in pitfalls dug in the snow, and baited with the Capelin fish; or in springs made with whale-bone, laid over a hole made in the snow, strewed over at bottom with the same kind of fish; or in traps made like little huts, with flat stones, with a broad one by way of door, which falls down (by means of a string baited on the inside with a piece of flesh) whenever the fox enters and pulls at it†. The *Greenlanders* preserve the skins for traffic; and in cases of necessity eat the flesh. They also make buttons of the skins: and split the tendons, and make use of them instead of thread. The blue furs are much more esteemed than the white.

10 A.

The SOOTY. D. with a dusky fur on every part; in size and habit resembling the former.

A distinct species. Inhabits *Iceland* in great numbers. Communicated to me by *John Thomas Stanley*, Esq; who, excited by his pas-

* *Faun. Groenl.* 20.

† *Crantz*, i. 72.

EUROPEAN FOX.

51

tion for science, in 1789 made a voyage to *Iceland*; and returned highly informed of the various instructive particulars respecting that wondrous island.

- 10 B. **GREENLAND.** D. above of a footy brown: ears rounded, white within: a white bed extends from each to the lower part of the throat; which, with the whole underside, and inside of the haunches, is white: tail white below, brown above; in one specimen the one half of the tail wholly white: beneath each eye a white spot: feet furred beneath. A very small species.

Inhabits *Greenland*. Bought by *Mr. Stanley*, at *Copenhagen*.

European Fox, Hist. Quad. N° 139.—Smellie, iv. 214.—LEV. MUS.

II. EUROPEAN.

DOG. With a pointed nose: pointed erect ears: body of a tawny red, mixed with ash-color: fore part of the legs black: tail long and bushy, tip with white.

Inhabits the northern parts of *North America*, from *Hudson's Bay* probably across the continent to the islands intermediate between *America* and *Kamtschatka*. Captain *Bering* saw there five quite tame, being unused to the sight of man.

This species gradually decreases to the southward, in numbers and in size: none are found lower than *Pensylvania*. They are supposed not to have been originally natives of that country. The *Indians* believe they came from the north of *Europe* in an excessive hard winter, when the sea was frozen. The truth seems to be, that they were driven in some severe season from the north of their own country, and have continued there ever since. They abound about *Hudson's Bay*, the *Labrador* country, and in *Newfoundland*

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and *Canada*; and are found in *Iceland**. They burrow as the *European* foxes do; and in *Hudson's Bay*, during winter, run about the woods in search of prey, feeding on birds and lesser animals, particularly mice.

New England is said to have been early stocked with foxes by a gentleman who imported them from *England*, for the pleasure of the chase †; and that the present breed sprung from the occasion. This species is reckoned among the pernicious animals, and, being very destructive to lambs, are proscribed at the rate of two shillings a head.

The variety of *British* fox, with a black tip to the tail, seems unknown in *America*.

The skins are a great article of commerce: abundance are imported annually from *Hudson's Bay* and *Newfoundland*. The natives of *Hudson's Bay* eat the flesh, rank as it is.

This species abounds in *Kamtschatka*, and is the finest red fur of any known: grows scarce within the Arctic circle of the *Asiatic* regions, and is found there often white.

* BLACK.

THIS variety is found very often entirely black, with a white tip to the tail; and is far inferior in value and beauty to those of *Kamtschatka* and *Siberia*, where a single skin sells for four hundred rubles.

The best in *North America* are found on the *Labrador* side of *Hudson's Bay*. They are also very common on the islands opposite to *Kamtschatka*. The *American* black foxes, which I have examined, are frequently of a mixed color: from the hind part of the head to

* *Olaffen*, i. 31.

† *Kalm*, i. 283.

CROSS AND BRANT FOX.

53

the middle of the back is a broad black line: the tail, legs, and belly, black: the hairs on the face, sides, and lower part of the back, cinereous; their upper ends black; the tip white.

FOX. With a bed of black running along the top of the back, crossed by another passing down each shoulder; from whence it took the name. The belly is black: the color of the rest of the body varies in different skins; but in all is a mixture of black, cinereous, and yellow: the fur in all very soft: and the tail very bushy and full of hair; for nature, in the rigorous climate of the North, is ever careful to guard the extremities against the injury of cold.

β CROSS.

This is likewise a very valuable variety. It is remarked, that the more desirable the fur is, the more cunning and difficult to be taken is the fox which owns it*. The *Cossacks* quartered in *Kamtshatka* have attempted for two winters to catch a single black fox. The Cross-fox, *Vulpes crucigera* of *Gesner*, and *Kors-raef* of the *Swedes* †, is found in all the Polar countries.

In the new-discovered *Fox islands* these animals abound: one in three or four are found entirely black, and larger than any in *Siberia*: the tail also is tipped with white. But as they live among the rocks, there being no woods in those islands, their hair is almost as coarse as that of the Wolf, and of little value compared to the *Siberian*.

Brant Fox, *Hist. Quad.* p. 235.

FOX. With a very sharp and black nose: space round the ears ferruginous: forehead, back, shoulders, sides, and thighs, red, cinereous, and black: the ash-color predominates, which

γ BRANT.

* *Hist. Kamtschatka*, 95.

† *Gesner Quad.* 967.—*Faun. Suec.* N° 4.

gives

gives it a hoary look: belly yellowish: tail black above, cinereous on the sides, red beneath.

About half the size of the common fox. Described from one Mr. *Brooks* received from *Pensylvania*, under the name of *Brandt-fox*; but it had not that bright redness to merit the name of either *Brandt-fuchse*, or *Brand-raef*, given by *Gefner* and *Linnaeus*.

2 CORSAK.

Corsak Fox, *Hist. Quad.* p. 236.

FOX. With upright ears: yellowish-green irides: throat white: color, in summer, pale tawny; in winter, cinereous: middle of the tail cinereous; base and tip black; the whole very full of hair: the fur is coarser and shorter than that of the common fox.

I discovered this species among the drawings of the late *Taylor White*, Esq; who informed me that it came from *North America*. I imagine, from *Hudson's Bay*.

This species is very common in the hilly and temperate parts of *Tartary*, from the *Don* to the *Amur*; but never is found in woody places: it burrows deep beneath the surface. It is also said to inhabit the banks of the rivers *Indigisky* and *Anadyr*, where the hills grow bare. In the rest of *Siberia* it is only known beyond lake *Baikal*; and from skins brought by the *Kirghisan* and *Bucharian* traders. In *Russia* it is found in the deserts towards *Crimaea* and *Astracan*, and also on the southern end of the *Uralian* mountains.

12. GREY.

Grey Fox, *Hist. Quad.* No 142.

FOX. With a sharp nose: long sharp upright ears: long legs: color entirely grey, except a little redness about the ears.

Inhabits

GREY AND SILVERY FOX.

55

Inhabits from *New England* to the southern end of *North America*; but are far more numerous in the southern colonies. They have not the rank smell of the red foxes. They are also less active, and grow very fat*. They breed in hollow trees: give no diversion to the sportsmen, for after a mile's chase they run up a tree †. They feed on birds; are destructive to poultry; but never destroy lambs ‡. The skins are used to line clothes: the fur is in great request among the hatters. The grease is reckoned efficacious in rheumatic disorders.

Silvery Fox, *Hist. Quad.* N° 143.

13. SILVERY.

FOX. With a fine and thick coat of a deep brown color, overspread with long silvery hairs of a most elegant appearance.

Inhabits *Louisiana*, where their holes are seen in great abundance on the woody heights. As they live in forests, which abound in game, they never molest the poultry, so are suffered to run at large §.

They differ specifically from the former, more by their nature in burrowing, than in colors.

Mr. *Hutchins* informed me of a whitish grey Fox, no larger than a Hare, common among the *Archibininne* Indians: four thousand of their skins have been sent in one year to the factories.

* *Lawson*, 125. † *Catesby*, ii. 78.—*Josselyn*, 82. ‡ *Kalm*, i. 282.
§ *Du Roi*, ii. 64.—*Charlevoix*, v. 196.

HIST.

CAT.

HIST. QUAD. GENUS XIX.

14. PUMA.

Hist. Quad. N^o 160.—*Smellie*, v. 197. 200.—*LEV. MUS.*

CAT. With a small head; large eyes: ears a little pointed: chin white: back, neck, sides, and rump, of a pale brownish red, mixed with dusky hairs: breast, belly, and inside of the legs, cinereous: tail a mixture of dusky and ferruginous, the tip black.

The teeth of a vast size: claws whitish; the outmost claw of the fore feet much larger than the rest: the body very long: the legs high and strong. The length of that I examined was five feet three from head to tail; of the tail, two feet eight.

Inhabits the continent of *North America*, from *Canada* to *Florida*; and the species is continued from thence low into *South America*, through *Mexico*, *Guiana*, *Brazil*, and the province of *Quito*, in *Peru*, where it is called *Puma*, and by the *Europeans* mistaken for a *Lion*: it is, by reason of its fierceness, the scourge of the country. The different climate of *North America* seems to have subdued its rage, and rendered it very fearful of mankind: the least cur, in company with his master, will make it run up a tree*, which is the opportunity of shooting it. It proves, if not killed outright, a dangerous enemy; for it will descend, and attack either man or beast. The flesh is white, and reckoned very good. The *Indians* use the skin for winter habits; and when dressed is made into shoes for women, and gloves for men†.

* *Catesby*, App. xxv.† *Lawson*, 118.

It

P U M A. L Y N X.

57

It is called in *North America* the Panther, and is the most pernicious animal of that continent. Lives in the forests. Sometimes purs, at other times makes a great howling. Is extremely destructive to domestic animals, particularly to hogs. It preys also upon the Moose, and other deer; falling on them from the tree it lurks in, and never quits its hold*. The deer has no other way of saving itself, but by plunging into the water, if there happens to be any near; for the Panther, like the Cat, detests that element. It will feed even on beasts of prey. I have seen the skin of one which was shot, just as it had killed a wolf. When it has satisfied itself with eating, it carefully conceals the rest of the carcase, covering it with leaves. If any other animal touches the reliques, it never touches them again.

Hist. Quad. N° 170.—*Smellie*, v. 207. 217.—*LEV. Mus.*

15. LYNX.

CAT. With pale yellow eyes: ears erect, tufted with black long hair: body covered with soft and long fur, cinereous tinged with tawny, and marked with dusky spots, more or less visible in different subjects, dependent on the age, or season in which the animal is killed: the legs strong and thick: the claws large. About three times the size of a common Cat: the tail only four inches long, tipped with black.

Inhabits the vast forests of *North America*: is called in *Canada*, *Le Chat*, ou *Le Loup-cervier* †, on account of its being so destructive to deer; which it drops on from the trees, like the former, and,

* *Charlevoix*, v. 189, who by mistake calls it *Carcajou*, and *Kincajou*; two very different animals.

† *Charlevoix*, v. 195.

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fixing

fixing on the jugular vein, never quits its hold till the exhausted animal falls through loss of blood *.

The *English* call it a Wild Cat. It is very destructive to their young pigs, poultry, and all kind of game. The skins are in high esteem for the softness and warmth of the fur; and great numbers are annually imported into *Europe*.

The *LYNX* is the most formidable enemy which the Sheep has: it is pretended that they only suck the blood: but it is pretty certain that they also devour the liver and lungs, for those parts are often found eaten. The little *Kat-lo* or Lynx is very scarce; its fur is esteemed more valuable than that of the greater or *Warglo*. It is supposed to be a particular species.—Mr. *Oedman*.

16. BAY.

Bay Lynx. *Hist. Quad.* N° 171.

CAT. With yellow irides: ears like the former: color of the head, body, and outside of the legs and thighs, a bright bay, obscurely marked with dusky spots: the forehead marked with black stripes from the head to the nose: cheeks white, varied with three or four incurvated lines of black: the upper and under lip, belly, and insides of the legs and thighs, white: the inside of the upper part of the fore legs crossed with two black bars: the tail short; the upper part marked with dusky bars, and near the end with one of black; the under side white. In size, about twice that of a common Cat; the fur shorter and smoother than that of the former.

This species is found in the internal parts of the province of *New York*. I saw one living a few years ago in *London*. The black bars on the legs and tail are specific marks.

* *Larson*, 118.—*Catesby*, App. xxv.

MOUNTAIN CAT.

59

Hist. Quad. N° 168.

Cat-a-mountain? *Lawson*, 118.—*Du Pratz*, ii. 64.

17. MOUNTAIN.

CAT. With upright pointed ears, marked with two brown bars: head and upper part of the body of a reddish brown, with long narrow stripes of black: the sides and legs with small round spots: chin and throat of a clear white: belly of a dull white: tail eight inches long, barred with black. Length from nose to tail two feet and a half.

Size:

Inhabits *North America*. Is said to be a gentle animal, and to grow very fat. Described originally in the *Memoires de l'Academie*; since which an account of another, taken in *Carolina*, was communicated by the late Mr. *Collinson* to the Count *de Buffon* *. The only difference is in size; for the last was only nineteen inches long: the tail four; but the same characteristic stripes, spots, and bars, on the tail, were similar in both.

There still remain undescribed some animals of the Feline race, which are found in *North America*, but too obscurely mentioned by travellers to be ascertained. Such is the beast which *Lawson* saw to the westward of *Carolina*, and calls a Tiger. He says it was larger than the Panther, i. e. *Puma*, and that it differed from the Tiger of *Asia* and *Africa* †. It possibly may be the *Brazilian* Panther, *Hist. Quad.* N° 158, which may extend further north than we imagine. It may likewise be the Cat-a-mount of *Du Pratz* ‡; which, he says, is as high as the Tiger, i. e. *Puma*, and the skin extremely beautiful.

OBSCURE SPECIES.

The *Pijoux* of *Louisiana*, mentioned by *Charlevoix* §, are also ob-

* *Supplem.* iii. 227.

† *Hist. Carolina*, 119.

‡ ii. 64.—I wish to suppress the synonym of *Cat-a-mount*, as applied to the *Cayenne* Cat, as it seems applicable to a much larger species.

§ *Hist. de la Nouv. France*, vi. 158.

DOMESTIC CAT.

scure animals. He says they are very like our Wild Cats, but larger: that some have shorter tails, and others longer. The first may be referred to one of the three last species; the last may be our *Cayenne Cat*, N° 163.



Domestic Cats are kept in *Iceland* and *Norway* *. Some of them escape and relapse to a savage state. In *Iceland* those are called *Urdakelster*, because they live under rocks and loose stones, where they hide themselves. They prey on small birds. The most valuable of their skins are sold for twelve *Danish* skillings, or six pence a-piece. *Linnaeus*, speaking of the cats of *Sweden*, says, they are of exotic origin †. They are not found wild either in that kingdom, or any part of the *Russian* dominions. Unknown in *America*.

* *Olaf. Iceland*, i. Paragr. 80.—*Pontop.* ii. 8.

† *Faun. Suec.* N° 9.

POLAR BEAR.

61

HIST. QUAD. GENUS XX.

BEAR.

Hist. Quad. N^o 175.—LEV. MUS.

18. POLAR.

BEAR. With a long narrow head and neck: tip of the nose black: teeth of a tremendous magnitude: hair of a great length, soft, and white, and in part tinged with yellow: limbs very thick and strong: ears short and rounded.

Travellers vary about their size. *De Buffon* quotes the authority of *Gerard le Ver** for the length of one of the skins, which, he says, was twenty-three feet. This seems to be extremely misrepresented; for *Gerard*, who was a companion of the famous *Barantz*, and *Heemskirk*, a voyager of the first credit, killed several on *Nova Zembla*, the largest of which did not exceed thirteen feet in length†. They seem smaller on *Spitzbergen*: one measured by order of a noble and able navigator‡, in his late voyage towards the Pole, was as follows: I give all the measurements to ascertain the proportions.

	Feet.	Inches.
Length from snout to tail - -	7	1
from snout to shoulder-bone - -	2	3
Height at the shoulder - -	4	3
Circumference near the fore legs - -	7	0
of the neck near the ear - -	2	1
Breadth of the fore-paw - -	0	7
Weight of the carcase without the head,		
skin, or entrails - - -	610lb.	

* *De Buffon*, Suppl. iii. 200.† See *Le Ver*, p. 14. ed. 1606. *Amstfeld*.‡ The Honorable *Constantine John Phipps*, now Lord *Mulgrave*.

This

PLACE.

This species, like the Rein and Arctic Fox, almost entirely surrounds the neighborhood of the Polar circle. It is found within it, far as navigators have penetrated; in the island of *Spitzbergen*, and within *Baffin's Bay*; in *Greenland* and *Hudson's Bay*; in *Terra di Labrador* *; and, by accident, wafted from *Greenland*, on islands of ice, to *Iceland* and *Newfoundland*. It perhaps attends the course of the Arctic circle along the vast regions of *America*; but it is unknown in the groupes of islands between that continent and *Asia*; neither is it found on the *Tchuktli Nofs*, or the Great Cape, which juts into the sea north of *Kamtschatka* †. None are ever seen in that country. But they are frequent on all the coasts of the Frozen Ocean, from the mouth of the *Ob* ‡, eastward; and abound most about the estuaries of the *Jeneisei* and *Lena*. They appear about those savage tracts, and abound in the unfrequented islands of *Nova Zembla*, *Cherry*, and *Spitzbergen*, where they find winter quarters undisturbed by mankind. The species is happily unknown along the shores of the White sea, and those of *Lapland* and *Norway*. Possibly even those rigorous climates may be too mild for animals that affect the utmost severity of the Arctic zone. They never are seen farther south in *Siberia* than *Mangasea*, nor wander into the woody parts, unless by accident in great mists.

They are sometimes brought alive into *England*. One which I saw was always in motion, restless, and furious, roaring in a loud and hoarse tone; and so impatient of warmth, that the keeper was obliged to pour on it frequently pailfuls of water. In a state of nature, and in places little visited by mankind, they are of dreadful ferocity. In *Spitzbergen*, and the other places annually frequented by the human race, they dread its power, having experienced its superiority,

* *Phil. Trans.* lxiv. 377.
iii. 805.

† *Muller*, Pref. xxv.

‡ *Purchas's Pilgrims*,

and

and shun the conflict: yet even in those countries prove tremendous enemies, if attacked or provoked.

Barentz, in his voyages in search of a north-east passage to *Cbina*, had fatal proofs of their rage and intrepidity on the island of *Nova Zembla*: his seamen were frequently attacked, and some of them killed. Those whom they seized on they took in their mouths, ran away with the utmost ease, tore to pieces, and devoured at their leisure, even in sight of the surviving comrades. One of these animals was shot preying on the mangled corpse, yet would not quit its hold; but continued staggering away with the body in its mouth, till dispatched with many wounds *.

They will attack, and attempt to board, armed vessels far distant from shore; and have been with great difficulty repelled †. They seem to give a preference to human blood; and will greedily disinter the graves of the buried, to devour the cadaverous contents ‡.

Their usual food is fish, seals, and the carcases of whales. On land, they prey on deer §, hares, young birds, and eggs, and often on whortleberries and crowberries. They are at constant enmity with the Walrus, or Morse: the last, by reason of its vast tusks, has generally the superiority; but frequently both the combatants perish in the conflict ||.

They are frequently seen in *Greenland*, in lat. 76, in great droves; where, allured by the scent of the flesh of seals, they will surround the habitations of the natives, and attempt to break in ¶; but are soon driven away by the smell of burnt feathers **. If one of them is by any accident killed, the survivors will immediately eat it ††.

Food.

* *Heemskirk's Voy.* 14.

† The same, 18.

‡ *Marten's Spitzb.* 102.

§ *Faun. Groenl.* p. 23.

|| *Egede*, 83.

¶ The same, 60.

** *Faun.*

Groenl. p. 23.

†† *Heemskirk*, 51.

They

They grow excessively fat ; a hundred pounds of fat has been taken out of a single beast. Their flesh is coarse, but is eaten by the seamen : it is white, and they fancy it tastes like mutton. The liver is very unwholesome, as three of *Heemskirk's* sailors experienced, who fell dangerously ill on eating some of it boiled *. The skin is an article of commerce : many are imported, and used chiefly for covers to coach-boxes. The *Greenlanders* feed on the flesh and fat ; use the skins to sit on, and make of it boots, shoes, and gloves ; and split the tendons into thread for sewing.

During summer they reside chiefly on islands of ice, and pass frequently from one to the other. They swim most excellently, and sometimes dive, but continue only a small space under water. They have been seen on islands of ice eighty miles from any land, preying and feeding as they float along. They lodge in dens formed in the vast masses of ice, which are piled in a stupendous manner, leaving great caverns beneath : here they breed, and bring one or two at a time, and sometimes, but very rarely, three. Great is the affection between parent and young ; they will sooner die than desert one another †. They also follow their dams a very long time, and are grown to a very large size before they quit them.

During winter they retire, and bed themselves deep beneath, forming spacious dens in the snow, supported by pillars of the same, or to the fixed ice beneath some eminence ; where they pass torpid the long and dismal night ‡, appearing only with the return of the sun §. At their appearance the *Arctic* Foxes retire to other haunts ||.

The Polar Bear became part of the royal menagery as early as

* *Heemskirk*, 45.

† *Marten's Spitzb.* 102.

‡ *Egede*, 60.—*Martens* says, that the fat is used in pains of the limbs, and that it assists parturition.

§ *Heemskirk's Voy. in Purchas*, iii. 500, 501.

|| The same, 499.

the

the reign of *Henry III.* Mr. *Walpole* has proved how great a patron that despised prince was of the Arts. It is not less evident that he extended his protection to Natural History. We find he had procured a White Bear from *Norway*, from whence it probably was imported from *Greenland*, the *Norwegians* having possessed that country for some centuries before that period. There are two writs extant from that monarch, directing the sheriffs of *London* to furnish six pence a day to support our White Bear in our Tower of *London*; and to provide a muzzle and iron chain to hold him when out of the water; and a long and strong rope to hold him, when he was fishing in the *Tbames* *. Fit provision was made at the same time for the king's Elephant.

The skins of this species, in old times, were offered by the hunters to the high altars of cathedrals, or other churches, that the priest might stand on them, and not catch cold when he was celebrating high mass in extreme cold weather. Many such were annually offered at the cathedral at *Drontheim* in *Norway*; and also the skins of wolves, which were sold to purchase wax-lights to burn in honor of the saints †.

Hist. Quad. N° 174.—Smellie, v. 19.

19. BLACK.

BEAR. With a long pointed nose, and narrow forehead: the cheeks and throat of a yellowish brown color: hair over the whole body and limbs of a glossy black, smoother and shorter than that of the *European* kind.

They are usually smaller than those of the old world; yet Mr. *Bertram* gives an instance of an old he-bear killed in *Florida*, which

* *Madox's Antiquities of the Exchequer*, i. 376.

† *Olaus Magnus*, lib. xviii. c. 20.

was seven feet long, and, as he guessed, weighed four hundred pounds *.

These animals are found in all parts of *North America*, from *Hudson's Bay* to the southern extremity; but in *Louisiana* and the southern parts they appear only in the winter, migrating from the north in search of food. They spread across the northern part of the *American* continent to the *Asiatic* isles. They are found in the *Kurilski* islands, which intervene between *Kamtschatka* and *Japan* †, *Jesé Masima*, which lies north of *Japan* ‡, and probably *Japan* itself; for *Kämpfer* says, that a few small bears are found in the northern provinces §.

FOOD:

It is very certain that this species of bear feeds on vegetables. *Du Pratz*, who is a faithful as well as intelligent writer, relates, that in one severe winter, when these animals were forced in multitudes from the woods, where there was abundance of animal food, they rejected that, notwithstanding they were ready to perish with hunger; and, migrating into the lower *Louisiana*, would often break into the courts of houses. They never touched the butchers meat which lay in their way, but fed voraciously on the corn or roots they met with ||.

Necessity alone sometimes compels them to attack and feed on the swine they meet in the woods: but flesh is to them an unnatural diet. They live on berries, fruits, and pulse of all kinds, and feed much on the black mulberry ¶; are remarkably fond of potatoes, which they very readily dig up with their great paws; make great havock in the fields of maize; and are great lovers of milk and honey. They feed much on herrings, which they catch in the season when those fish come in shoals up the creeks, which gives their

* Journal of his travels into *East Florida*, 26.

† *Voy. au Nord*. iv. 5.

§ *Hist. Japan*, i. 126.

‡ *Hist. Kamtsch.* iii. 287.

¶ *Adair*, 360.

|| *Du Pratz*, ii. 57.

BLACK BEAR.

67

flesh a disagreeable taste ; and the same effect is observed when they eat the bitter berries of the *Tupelo*.

They are equally inoffensive to mankind, provided they are not irritated ; but if wounded, they will turn on their assailant with great fury, and, in case they can lay hold, never fail of hugging him to death ; for it has been observed they never make use, in their rage, of either their teeth or claws. If they meet a man in a path they will not go out of his way ; but will not attack him. They never seek combat. A small dog will make them run up a tree.

The *American* bears do not lodge in caves or clefts of rocks, like those of *Europe*. The bears of *Hudson's Bay* form their dens beneath the snow, and suffer some to drop at the mouth, to conceal their retreat.

The naturalist's poet, with great truth and beauty, describes the retreat of this animal in the frozen climate of the north :

There through the piny forest half absorpt,
Rough tenant of those shades, the shapeless BEAR,
With dangling ice all horrid, stalks forlorn ;
Slow pac'd, and sower as the storms increase,
He makes his bed beneath th' inclement drift,
And with stern patience, scorning weak complaint,
Hardens his heart against assailing want.

Those of the southern parts dwell in the hollows of antient trees. The hunter discovers them by striking with an ax the tree he suspects they are lodged in, then suddenly conceals himself. The Bear is immediately roused, looks out of the hollow to learn the cause of the alarm ; seeing none, sinks again into repose *. The hunter then forces him out, by flinging in fired reeds ; and shoots him while he descends the body of the tree, which, notwithstanding his awkward

* *Du Pratz*, ii. 61.

appearance, he does with great agility; nor is he less nimble in ascending the tops of the highest trees in search of berries and fruits.

The long time which these animals subsist without food is amazing. They will continue in their retreat for six weeks without the least provision, remaining either asleep or totally inactive. It is pretended that they live by sucking their paws; but that is a vulgar error. The fact is, they retire immediately after autumn, when they have fattened themselves to an excessive degree by the abundance of the fruits which they find at that season. This enables animals, which perspire very little in a state of rest, to endure an abstinence of uncommon length. But when this internal support is exhausted, and they begin to feel the call of hunger, on the approach of the severe season, they quit their dens in search of food. Multitudes then migrate into the lower parts of *Louisiana*: they arrive very lean; but soon fatten with the vegetables of that milder climate*. They never wander far from the banks of the *Mississipi*, and in their march form a beaten path like the track of men.

Lawson and *Catesby*† relate a very surprizing thing in respect to this animal, which is, that neither *European* or *Indian* ever killed a Bear with young. In one winter were killed in *Virginia* five hundred bears, and among them only two females; and those not pregnant. The cause is, that the male has the same unnatural dislike to its offspring as some other animals have: they will kill and devour the cubs. The females therefore retire, before the time of parturition, into the depth of woods and rocks, to elude the search of their savage mates. It is said that they do not make their appearance with their young till *March*‡.

* *Du Pratz*, ii. 60.

† *Lawson*, 117.—*Catesby*, *App.* xxvi.

‡ *Josselyn's Voy.* 91.

All who have tasted the flesh of this animal say, that it is most delicious eating: a young Bear, fattened with the autumnal fruits, is a dish fit for the nicest epicure. It is wholesome and nourishing, and resembles pork more than any other meat. The tongue and the paws are esteemed the most exquisite morsels; the hams are also excellent, but apt to rust, if not very well preserved.

Four inches depth of fat has been found on a single Bear, and fifteen or sixteen gallons of pure oil melted from it*. The fat is of a pure white, and has the singular quality of never lying heavy on the stomach, notwithstanding a person drank a quart of it†. The *Americans* make great use of it for frying their fish. It is besides used medicinally, and has been found very efficacious in rheumatic complaints, aches, and strains.

The *Indians* of *Louisiana* prepare it thus:—As soon as they have killed the Bear, they shoot a Deer; cut off the head, and draw the skin entire to the legs, which they cut off: they then stop up every orifice, except that on the neck, into which they pour the melted fat of the Bear; which is prepared by boiling the fat and flesh together. This they call a *Deer of oil*, and sell to the *French* for a gun, or something of equal value‡.

Bears grease is in great repute in *Europe* for its supposed quality of making the hair to grow on the human head. A great chymist in the *Haymarket* in *London* used to fatten annually two or three Bears for the sake of their fat.

The skin is in use for all purposes which the coarser sorts of furs are applied to: it serves in *America*, in distant journies, for coverlets; and the finer parts have been in some places used in the hat manufacture§.

The *Indians* of *Canada* daub their hands and face with the grease,

* *Bartram's Journ. E. Florida*, 26.
 n. 62. § *Larson*, 117.

† *Larson*, 116.

‡ *De Pratz*,

to preserve them from the bite of musketoes: they also smear their bodies with the oil after excessive exercise *. They think, like the *Romans* of old, that oil supple their joints, and preserves them in full activity.

20. BROWN.

Black Bear, *Hist. Quad.* N° 174.—*Smellie*, v. 19.

BEAR. With long shaggy hair, usually dusky or black, with brown points; liable to vary, perhaps according to their age, or some accident, which does not create a specific difference.

α. A variety of a pale brown color, whose skins I have seen imported from *Hudson's Bay*. The same kind, I believe, is also found in *Europe*. The cubs are of a jetty black, and their necks often encircled with white.

β. Bears spotted with white.

γ. Land Bears, entirely white. Such sometimes fall from the lofty mountains which border on *Siberia*, and appear in a wandering manner in the lower parts of the country †. *Marco Polo* relates, that they were frequent in his time in the north of *Tartary*, and of a very great size.

δ. Grizzly Bears. These are called by the *Germans* *Silber-bär*, or the *Silver-bear*, from the mixture of white hairs. These are found in *Europe*, and the very northern parts of *North America*, as high as lat. 70; where a hill is called after them, *Grizzle Bear Hill*, and where they breed in caverns ‡. The ground in this neighborhood is in all parts turned by them in search of the hoards formed by the Ground Squirrels for winter provision.

* *Kalm*, iii. 13.

† *Decker Pallas*.

‡ *Mr. Samuel Hearne*.

All

All these varieties form but one species. They are granivorous and carnivorous, both in *Europe* and *America*; and I believe, according to their respective palates or habits, one may be deemed a variety which prefers the vegetable food; another may be distinguished from its preference of animal food. Mr. *Graham* assures me, that the brown Bears, in the inland parts of *Hudson's Bay*, make great havock among the Buffaloes: are very large, and very dangerous when they are attacked and wounded.

The Bears of *Kamtchatka* are of a dun brown color: and feed chiefly on fish, or berries. They are far from rejecting animal food; even mankind becomes their prey when pressed by hunger; and they will hunt the natives, in such cases, by scent, and prowl out of their usual tracts for that purpose: at those times, or when wounded they are exceedingly fierce*. It is said that they give chase to the *Argali* with great address. They know that they have no chance in taking them by speed; the Bears therefore climb up the rugged mountains, and gain the heights above the spots where the wild sheep feed: they with their paws sling down pieces of rock upon the herd; and, if they happen to maim any, descend and make a repast on the lamed animal†. When the Bears find plenty of food they will not attack the human kind: yet if they find a *Kamtchadale* asleep on the ground, they will through wantonness bite him severely, and sometimes tear a piece of flesh away. People thus injured are called *Dranki*, or the *slayed*‡.

In all savage nations the Bear has been an object of veneration. Among the *Americans* a feast is made in honor of each that is killed. The head of the beast is painted with all colors, and placed on an elevated place, where it receives the respects of all the guests, who

BEARS VENERATED
IN AMERICA.

* Captain KING, in COOK's voy. iii. 305.

† Same 306.

‡ *Hist. Kamtchatka*, iii. 386.

celebrate

celebrate in songs the praises of the Bear. They cut the body in pieces, and regale on it, and conclude the ceremony*.

CHASE.

The chase of these animals is a matter of the first importance, and never undertaken without abundance of ceremony. A principal warrior first gives a general invitation to all the hunters. This is followed by a most serious fast of eight days, a total abstinence from all kinds of food; notwithstanding which, they pass the day in continual song. This they do to invoke the spirits of the woods to direct them to the place where there are abundance of Bears. They even cut the flesh in divers parts of their bodies, to render the spirits more propitious. They also address themselves to the *manes* of the beasts slain in preceding chases, as if it were to direct them in their dreams to plenty of game. One dreamer alone cannot determine the place of chase, numbers must concur; but, as they tell each other their dreams, they never fail to agree: whether that may arise from complaisance, or by a real agreement in the dreams from their thoughts being perpetually turned on the same thing.

The chief of the hunt now gives a great feast, at which no one dares to appear without first bathing. At this entertainment they eat with great moderation, contrary to their usual custom. The master of the feast alone touches nothing; but is employed in relating to the guests ancient tales of the wonderful feats in former chases: and fresh invocations to the manes of the deceased Bears conclude the whole. They then fall forth amidst the acclamations of the village, equipped as if for war, and painted black. Every able hunter is on a level with a great warrior; but he must have killed his dozen great beasts before his character is established: after which his alliance is as much courted as that of the most valiant captain.

* Charlevoix, Nouv. Fr. v. 443.

They

They now proceed on their way in a direct line: neither rivers, marshes, or any other impediments, stop their course; driving before them all the beasts which they find in their way. When they arrive in the hunting-ground, they surround as large a space as their company will admit, and then contract their circle; searching, as they contract, every hollow tree, and every place fit for the retreat of the bear, and continue the same practice till the time of the chase is expired.

As soon as a bear is killed, a hunter puts into its mouth a lighted pipe of tobacco, and, blowing into it, fills the throat with the smoke, conjuring the spirit of the animal not to resent what they are going to do to its body; nor to render their future chases unsuccessful. As the beast makes no reply, they cut out the string of the tongue, and throw it into the fire: if it crackles and runs in (which it is almost sure to do) they accept it as a good omen; if not, they consider that the spirit of the beast is not appeased and that the chase of the next year will be unfortunate.

The hunters live well during the chase, on provisions which they bring with them. They return home with great pride and self-sufficiency; for to kill a bear forms the character of a complete man. They again give a great entertainment, and now make a point to leave nothing. The feast is dedicated to a certain genius, perhaps that of Gluttony, whose resentment they dread, if they do not eat every morsel, and even sup up the very melted grease in which the meat was dressed. They sometimes eat till they burst, or bring on themselves some violent disorders. The first course is the greatest bear they have killed, without even taking out the entrails, or taking off the skin, contenting themselves with singeing the skin, as is practised with hogs*.

* *Charlevoix*, v. 169 to 174.

IN KAMTSCHAT-
KA.

The *Kamtschatkans*, before their conversion to Christianity, had almost similar superstitions respecting bears and other wild beasts: they entreated the bears and wolves not to hurt them in the chase, and whales and marine animals not to overturn their boats. They never call the two former by their proper name, but by that of *Sipang*, or *ill-luck*.

At present the *Kamtschatkans* kill the bear and other wild beasts with guns: formerly they had variety of inventions; such as filling the entrance of its den with logs, and then digging down upon the animal and destroying it with spears*. In *Siberia* it is taken by making a trap-fall of a great piece of timber, which drops and crushes it to death: or by forming a noose in a rope fastened to a great log; the bear runs its head into the noose, and, finding itself engaged, grows furious, and either falls down some precipice and kills itself, or wearies itself to death by its agitations.

The killing of a bear in fair battle is reckoned as great a piece of heroism by the *Kamtschatkans* as it is with the *Americans*. The victor makes a feast on the occasion, and feasts his neighbors with the beast; then hangs the head and thighs about his tent by way of trophies.

These people use the skins to lie on, and for coverlets; for bonnets, gloves, collars for their dogs, soles for their shoes, to prevent them from slipping on the ice. Of the shoulder-blades they make instruments to cut the grass; of the intestines, covers for their faces, to protect them from the sun during spring; and the *Cossacks* extend them over their windows instead of glass. The flesh and fat is among the chief dainties of the country†.

Superstitions, relative to this animal, did not confine themselves to *America* and *Asia*, but spread equally over the north of *Europe*.

* *Hist. Kamtschatka*, Fr. iii. 73.

† The same, 390.

The *Laplanders* held it in the greatest veneration: they called it the *Dog of God*, because they esteemed it to have the strength of ten men, and the sense of twelve*. They never presume to call it by its proper name of *Guouzbja*, least it revenge the insult on their flocks; but style it *Moedda-aigia*, or the *old man in a furred cloak*†.

The killing of a Bear was reckoned as great an exploit in *Lapland* as it was in *America*, and the hero was held in the highest esteem by both sexes; and, by a singular custom, was forbid all commerce with his wife for three days. The *Laplanders* bring home the slain beasts in great triumph. They erect a new tent near their former dwelling, but never enter it till they have flung off the dres of the chase. They continue in it three entire days; and the women keep at home the same space. The men dress the flesh of the Bear in the new tent, and make their repast, giving part to the females; but take great care never to bestow on them a bit of the rump. Neither will they deliver to them the meat through the common entrance of the hut, but through a hole in another part. In sign of victory, the men sprinkle themselves with the blood of the beast.

After they have finished eating the flesh, they bury the bones with great solemnity, and place every bone in its proper place, from a firm persuasion that the Bear will be restored, and re-animate a new body.

At the pulling off the skin, and cutting the body into pieces, they were used to sing a song, but without meaning or rhyme‡; but the antient *Fins* had a song, which, if not highly embellished by the translator, is far from inelegant.

* *Leems Lapmark*, Suppl. 64.

† The same, 503.

‡ The same, Suppl.

W O I V E R E N E.

Beast ! of all forest beasts subdued and slain,
 Health to our huts and prey a hundred-fold
 Restore ; and o'er us keep a constant guard !
 I thank the Gods who gave so noble prey !
 When the great day-star hides beyond the *alps*,
 I hie me home ; and joy, all clad in flowers,
 For three long nights shall reign throughout my hut.
 With transport shall I climb the mountain's side.
 Joy op'd this day, joy shall attend its close.
 Thee I revere, from thee expect my prey :
 Nor e'er forgot my carol to the BEAR *.

21. WOLVERENE.

Hist. Quad. N° 176, 177. *Syn. Quad.*

Gulo, Pallas Spicil. Zool. Fasc. xiv. tab. ii.—LEV. MUS.

BEAR. With short rounded ears, almost concealed by the fur : face sharp, black, and pointed : back broad, and, while the animal is in motion, much elevated, or arched ; and the head carried low : the legs short and strong : claws long and sharp, white at their ends.

The length from nose to tail twenty-eight inches ; of the trunk of the tail seven inches. It is covered with thick long hairs, reddish at the bottom, black at the end ; some reach six inches beyond the tip.

The hairs on the head, back, and belly, are of the same colors, but much finer and softer. Before they are examined, the animal appears wholly black. The throat whitish, marked with black. Along the sides, from the shoulders to the tail, is a broad band of a ferruginous color : in several of the skins, brought from *Hudson's Bay*, I observed this band to be white. The legs are black ; the

* *Nichols's Russian Nations*, i. 50.

feet covered with hair on the bottom. On the fore feet of that which I examined were some white spots. On each foot were five toes, not greatly divided.

It hath much the action of a Bear; not only in the form of its back, and the hanging down of its head, but also in resting on the hind part of the first joint of its legs.

This is one of the local animals of *America*. I trace it as far north as the *Copper* river, and to the countries on the west and south of *Hudson's Bay, Canada*, and the tract as far as the straits of *Michillimackinac*, between the lakes *Huron* and *Superior*.

PLACE.

I have reason to think that the Glutton of the old writers is the same with this animal; and that in my History of Quadrupeds I unnecessarily separated them. Since I have received the late publication of Dr. *Pallas*, I am satisfied that it is common to the north of *America*, *Europe*, and *Asia*, even to *Kamtschatka*; inhabiting the vast forests of the north, even within the *Polar* circle. The *Kamtschatkans* value them so highly as to say, that the heavenly beings wear no other furs. The skins are the greatest present they can make their mistresses; and the women ornament their heads with the parts of the white banded variety. The *Russians* call these animals *Rossomak*; the *Kamtschatkans*, *Tymi*, or *Tummi*.

GLUTTON OF OLD WRITERS.

It is a beast of uncommon fierceness, the terror of the Wolf and Bear; the former, which will devour any carrion, will not touch the carcase of this animal, which smells more fetid than that of a Polecat. It has great strength, and makes vast resistance when taken; will tear the traps often to pieces; or if wounded, will snap the stock from the barrel of the musket; and often do more damage in the capture than the fur is worth.

MANNERS.

It preys indifferently on all animals which it can master. It feeds by night, and, being slow of foot, follows the track of wolves and foxes in the snow, in order to come in for share of their prey. It will

W O L V E R E N E.

will dig up the carcases of animals, and the provisions concealed by the huntsmen deep in the snow, which it will carry away to other places to devour. About the *Lena* it will attack horses, on whose backs are often seen the marks of its teeth and claws. By a wonderful sagacity it will ascend a tree, and fling from the boughs a species of moss which Elks and Reins are very fond of; and when those animals come beneath to feed on it, will fall on them and destroy them: or, like the Lynx, it ascends to the boughs of trees, and falls on the Deer which casually pass beneath, and adheres till they fall down with fatigue. It is a great enemy to the Beaver*, and is on that account sometimes called the *Beaver-eater*. It watches at the mouth of their holes, and catches them as they come out. It searches the traps laid for taking other beasts, and devours those which it finds taken. It breaks into the magazines of the natives, and robs them of the provisions; whether they are covered with logs, brushwood, and built high between two or three standing trees†.

It lodges in clefts of rocks, or in hollows of trees, and in *Siberia* often in the deserted holes of Badgers; never digging its own den, nor having any certain habitation. It breeds once a year, bringing from two to four at a litter‡. Its fur is much used for muffs. Notwithstanding its great fierceness when wounded, or first seizure, it is capable of being made very tame§.

FUR.

The skins are frequently brought from *Hudson's Bay*, and commonly used for muffs. In *Siberia* the skin is most valued which is black, and has left of the ferruginous band. These are chiefly found in the mountainous forests of *Jakutsk*, and used by the natives to adorn their caps. Few of the *Siberian* skins are sent into *Russia*, but are chiefly sold to the *Mongals* and *Chinese*.

* *Debbi*, 40.† *Mr. Graham*.

‡ The same.

§ *Edw.* ii. 103.

The

The relations of the excessive gluttony of this animal; that it eats till it is ready to burst, and that it is obliged to unload itself by squeezing its body between two trees; are totally fabulous: like other animals, they eat till they are satisfied, and then leave off*.

Hist. Quad. N° 178.—Smellie, v. 46.—L'EV. MUS.

22. RACCOON.

BEAR. With upper jaw larger than the lower: face sharp-pointed, and fox-like: ears short and rounded: eyes large, of a yellowish green; the space round them black: a dusky line extends from the forehead to the nose; the rest of the face, the cheeks, and the throat, white: the hair universally long and soft; that on the back tipped with black, white in the middle, and cinereous at the roots: tail annulated with black and white, and very full of hair: toes black, and quite divided: the fore-feet serve the purposes of a hand.

These animals vary in color. I have seen some of a pale brown, others white. Their usual length, from nose to tail, is two feet: near the tail about one.

Raccoons inhabit only the temperate parts of *North America*, from *New England* † to *Florida* ‡. They probably are continued in the same latitudes across the continent, being, according to *Dampier*, found in the isles of *Maria*, in the South Sea, between the south point of *California* and *Cape Corientes*. It is also an inhabitant of *Mexico*, where it is called *Mapach* §.

PLACE.

It lives in hollow trees, and is very expert at climbing. Like other beasts of prey, keeps much within during day, except it proves dark and cloudy. In snowy and stormy weather it confines itself to

MANNERS.

* *Hist. Kamtsch.* 385.

† *Josselyn's Voy.* 85.

‡ *Account of Florida*, 50.

§ *Fernand, Nov. Hisp.* i.

R A C C O O N.

its hole for a week together. It feeds indifferently on fruits or flesh; is extremely destructive to fields of mayz, and very injurious to all kinds of fruits; loves strong liquors, and will get excessively drunk. It makes great havock among poultry, and is very fond of eggs. Is itself often the prey of Snakes*.

Those which inhabit places near the shore live much on shell-fish, particularly oysters. They will watch the opening of the shell, dextrously put in its paw, and tear out the contents; sometimes the oyster suddenly closes, catches the thief, and detains it till drowned by the return of the tide. They likewise feed on crabs, both sea and land. It has all the cunning of the Fox. *Lawson* † says, that it will stand on the side of a swamp, and hang its tail over into the water: the crabs will lay hold, mistaking it for a bait; which, as soon as the Raccoon feels, it pulls out with a sudden jerk, and makes a prey of the cheated crabs.

It is made tame with great ease, so as to follow its master along the streets; but never can be broke from its habit of stealing, or killing of poultry ‡. It is so fond of sugar, or any sweet things, as to do infinite mischief in a house, if care is not taken §.

It has many of the actions of a Monkey; such as feeding itself with its fore feet, sitting up to eat, being always in motion, being very inquisitive, and examining every thing it sees with its paws. Notwithstanding it is not fond of water, it dips into it all sorts of dry food which is given to it; and will wash its face with its feet, like a Cat.

It is sought after on account of the fur. Some people eat it, and esteem it as very good meat. The *Swedes* call it *Siup*, and *Espan*; the *Dutch*, *Hespan*; and the *Iroquese*, *Affigbro*. The hair makes the best hats, next to that of the Beaver. The tail is worn round the neck in winter, by way of preservative against the cold ||.

* *Kalm*, i. 97. ii. 63.
|| *Kalm*, ii. 97.

† 121.

‡ *Kalm*, i. 208.

§ The same.

HIST. QUAD. GENUS XXI.

BADGER.

American Badger, *Hist. Quad.* p. 298. β .—*Smellie*, iv. 226.—*LEV. MUS.*

23. COMMON.

BADGER. With rounded ears: forehead, and middle of the cheeks, marked with a white line, extending to the beginning of the back, bounded on each side by another of black: cheeks white: space round the ears dusky: body covered with long coarse hair, cinereous and white.

The legs were wanting in the skin which I saw; but I supply that defect from *M. de Buffon's* description. They were dusky, and the toes furnished with claws, like the *European* kind. *M. de Buffon* observed only four toes on the hind feet; but then he suspected that one was torn off from the dried skin he saw.

These animals are rather scarce in *America*. They are found in the neighborhood of *Hudson's Bay*, and in *Terra di Labrador*; and perhaps as low as *Pennsylvania*, where they are called Ground Hogs*. They do not differ specifically from the *European* kind; but are sometimes found white in *America*†.

PLACE.

I do not discover them in northern *Asia*, nearer than the banks of the *Taik*‡. They are common in *China*, where they are frequently brought to the shambles, being an esteemed food §. In northern *Europe*, they are found in *Norway* and *Sweden* ||.

Le Comte de Buffon imagines this animal ¶ to be the *Carcajou* of the *Americans*, and not the *Wolveren*. The matter is uncertain:

* *Kalm*, i. 189.
Travels, ii. 83.
 tom. iii. 242.

† *Briffon Quad.* 185.
 || *Pontoppidan*, ii. 28.—*Faun. Suec.* N° 20.

‡ *Pallas*,
 § *Beil's*
 ¶ *Suppl.*

yet I find that name bestowed on the latter by *La Hontan*; by *Dobbs*, who makes it synonymous; and by *Charlevoix*, though the last mistakes the animal, yet not the manners of that which he ascribes it to. On the other hand, Mr. *Graham* and Mr. *Edwards* omit that title, and call it only *Wolveren*, or *Queequehatch*.

HIST. QUAD. GENUS XXII.

OPOSSUM.

Hist. Quad. N° 181.

24. VIRGINIAN.

OPOSSUM. With ten cutting teeth above, eight beneath : eyes black, small, and lively : ears large, naked, membranaceous, and rounded : face long and pointed ; whiskers on each side of the nose, and tufts of long hairs over the eyes : legs are short ; the thumb on the hind feet has a flat nail, the rest of the toes have on them sharp talons : the body is short, round, and thick : the tail long ; the base is covered with hair for three inches, the rest is covered with small scales, and has the disgusting resemblance of a Snake.

On the lower part of the belly of the female is a large pouch, in which the teats are placed, and in which the young lodge as soon as they are born. The body is cloathed with very long soft hairs, lying usually uneven : the color appears of a dirty white ; the lower parts of the hairs dusky : and above each eye is a whitish spot : the belly tinged with yellow.

The length of one I examined was seventeen inches, of the tail fourteen.

This species is found as far north as *Canada* *, where the *French* call it *Le Rat de bois* ; from thence it extends southward, even to the *Brazils* and *Peru*. The singularity of the ventral pouch of the female, and the manner of its bringing up its young, places it among the most wonderful animals of the new continent.

PLACE.

* Charlevoix, v. 197.



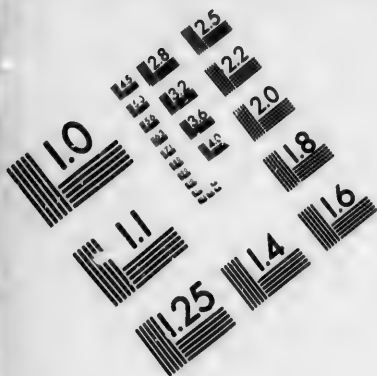
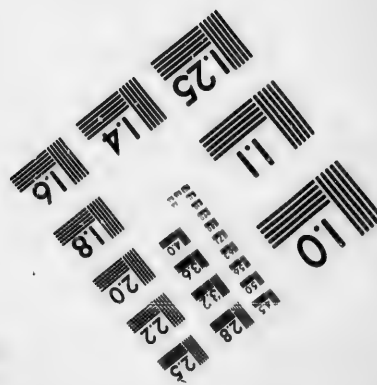
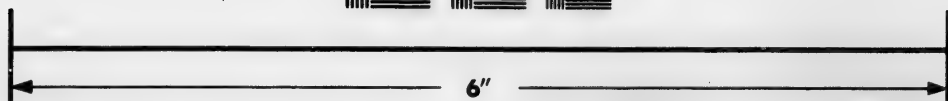
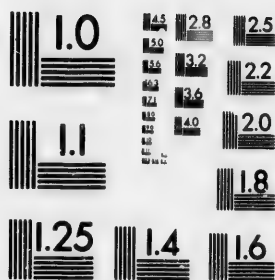


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As soon as the female finds herself near the time of bringing forth, she prepares a nest of coarse grass, covered with long pieces of sticks, near four feet high and five in diameter, confusedly put together *. She brings forth from four to six at a time. As soon as they come into the world they retreat into the false belly, blind, naked, and exactly resembling little fœtuses. They fasten closely to the teats, as if they grew to them; which has given cause to the vulgar error, that they were created so. There they adhere as if they were inanimate, till they arrive at a degree of perfection in shape, and attain sight, strength, and hair: after which they undergo a sort of second birth. From that time they run into the pouch as an asylum from danger. The female carries them about with the utmost affection, and would rather be killed than permit this receptacle to be opened; for she has the power of contracting or dilating the orifice by the help of some very strong muscles. If they are surprised, and have not time to retreat into the pouch, they will adhere to the tail of the parent, and escape with her †.

The Opossum is both carnivorous and frugivorous. It is a great enemy to poultry; and will suck the blood and leave the flesh untouched ‡. It climbs trees very expertly, feeding on wild fruits, and also on various roots. Its tail has the same prehensile quality as that of some species of Monkeys. It will hang from the branches by it, and by swinging its body, fling itself among the boughs of the adjacent trees. It is a very sluggish animal; has a very slow pace, and makes scarcely any efforts to escape. When it finds itself on the point of being taken, it counterfeits death; hardly any torture will make it give signs of life §. If the person retires, it will put itself in motion, and creep into some neighboring bush.

* *Bartram's Journal E. Florida*, 30.

† The same.

‡ *Du Pratz*, ii. 65.

§ The same, 66.

It is more tenacious of life than a Cat, and will suffer great violence before it is killed *.

The old animals are esteemed as delicate eating as a sucking pig; yet the skin is very fetid. The *Indian* women of *Louisiana* dye the hair, and weave it into girdles and garters †.

* *Larson*, 120.

† *Du Pratz*, ii. 66.

WEESEL.

HIST. QUAD. GENUS XXIII.

25. COMMON.

Hist. Quad. N° 192.—*Smellie*, iv. 257.—*LEV. MUS.*

WEESEL. With small rounded ears: beneath each corner of the mouth is a white spot: breast and belly white; rest of the body of a pale tawny brown. Its length, from the tip of the nose to the tail, is about seven inches; the tail two and a half.

PLACE.

Inhabits the country about *Hudson's Bay*, *Newfoundland*, and as far south as *Carolina* *. Mr. *Graham* sent some over, both in their summer coat, and others almost entirely white, the color they assume in winter. We meet with them again in *Kamtschatka*, and all over *Russia* and *Siberia*; and in those northern regions they regularly turn white during winter. One, which was brought from *Natka Sound* in *North America*, had between the ears and nose a bed of glossy black, which probably was its universal color before its change. Dr. *Irving* saw on *Moffen* island, north of *Spitzbergen*, lat. 80. an animal, perhaps of this kind, spotted black and white †.

26. STOA†.

Hist. Quad. N° 193.—*Smellie*, iv. 262.—*LEV. MUS.*

WEESEL. With short ears, edged with white: head, back, sides, and legs, of a pale tawny brown: under side of the body white: lower part of the tail brown, the end black.

In northern countries, changes in winter to a snowy whiteness,

* *Catesby*, App.† *Phipps's Voy.* 58.

the

the end of the tail excepted, which retains its black color: in this state is called an *Ermine*.

Length, from nose to tail, ten inches; the tail is five and a half.

Inhabits only *Hudson's Bay, Canada*, and the northern parts of *North America*. In *Newfoundland* it is so bold as to commit its thefts in open view. Feeds on eggs, the young of birds, and on the mice with which those countries abound. They also prey on Rabbits, and the White Grouse. The skins are exported from *Canada* among what the *French* call *la menuë pelleterie*, or small furs*.

It is found again in plenty in *Kamtschatka* †, the *Kurili* islands, *Siberia*, and in all the northern extremities of *Europe*. It is scarce in *Kamtschatka*; and its chase is not attended to, amidst the quantity of superior furs. But in *Siberia* and *Norway* they are a considerable article of commerce. In the former, they are taken in traps, baited with a bit of flesh ‡; in the latter, either shot with blunt arrows, or taken, as garden mice are in *England*, by a flat stone propped by a baited stick, which falls down on the left touch, and crushes them to death §. They are found in *Siberia* in great plenty in woods of birch, yet are never seen in those of fir. Their skins are sold there on the spot from two to three pounds sterling per hundred ||.

They are not found on the *Arctic* flats. The inhabitants of the *Ischuktschi Nofs* get them in exchange from the *Americans*, where they are of a larger size than any in the *Russian* dominions.

The excessive cold of certain winters has obliged even these hardy animals to migrate, as was evident in the year 1730, and 1744 ¶.

PLACE.

CAPTURE.

* *Charlevoix*, v. 197.
vols, i. 199.

† *Hist. Kamtschatka*, 99.

‡ *Bell's Tra-*

§ *Pentopidan*, ii. 25.

|| *Gmelin Russ. Samlung*, 516.

¶ *Nov. Sp. an.* 188.

27. PINE
MARTIN.

Hist. Quad. N° 200.—*Br. Zool.* i. N° 16.—*Smellie*, iv. 245.—*Lev. Mus.*

WEESEL. With white cheeks and tips of ears; yellow throat and breast; rest of the fur of a fine deep chefnut-color in the male, paler in the female: tail bushy, and of a deeper color than the body.

PLACE.

These animals inhabit, in great abundance, the northern parts of *America*; but I believe the species ceases before it arrives at the temperate provinces. They appear again in the north of *Europe*, extend across the *Uralian* chain, but do not reach the *Oby*.

MANNERS.

They inhabit forests, particularly those of fir and pine, and make their nests in the trees. Breed once a year, and bring from two to four at a litter. They feed principally upon mice; but destroy also all kinds of birds which they can master. They are taken by the natives of *Hudson's Bay* in small log-traps, baited, which fall on and kill them. The natives eat the flesh.

Their skins are among the more valuable furs, and make a most important article of commerce. I observed, that in one of the *Hudson's Bay Company's* annual sales, not fewer than 12,370 good skins, and 2,360 damaged, were sold; and in that year (1743) 30,325 were imported by the *French* from *Canada* into the port of *Rochelle*. They are found in great numbers in the midst of the woods of *Canada*; and once in two or three years come out in great multitudes, as if their retreats were overstocked: this the hunters look on as a forerunner of great snows, and a season favorable to the chase*.

It is remarkable, that notwithstanding this species extends across the continent of *America*, from *Hudson's Bay* to the opposite side,

* *Charlevoix*, v. 197.

yet

yet it is lost on the *Asiatic* side of the straits of *Tschuktschi*; nor is it recovered till you reach *Catherinebourg*, a district of *Siberia* west of *Tobolsk*, and twenty-five degrees west longitude distant from *America*. The finest in the known world are taken about *Ufa*, and in the mountains of *Caucasus* *. It is known that the *Tschuktschi* † procure the skins for cloathing themselves from the *Americans*; their country being destitute of trees, and consequently of the animals, inhabitants of forests, furnishing those useful articles.

The House Martin, *Hist. Quad.* N° 199, is found neither in *America*, or the *Arctic* countries.

Hist. Quad. N° 204.—*Smellie*, vii. 307.—*LEV. MUS.*

28. PEKAN.

WEESEL. With ears a little pointed: body and head covered with hair of a mixture of grey, chefnut, and black, and beneath protected by a cinereous down: the lower jaw encircled with white: legs and tail black: on the breast, between the fore-legs, a spot of white, and another on the belly between the hind-legs: toes covered above and below with fur.

I saw this and the following animal at *Paris*, in the cabinet of *M. Aubry*, *Curè de St. Louis en L'Isle*. They were in glass cases, so I could get only an imperfect view of them. According to *M. de Buffon*, the length of this was a foot and a half *French* measure; the tail ten inches ‡. The fur is fine; and the skins were often imported by the *French* from *Canada*.

This seems to me to be very nearly allied to the *European* Martin, N° 15. *Br. Zool.* vol. i. It agrees very much in dimensions,

* *Dodgson Pallas.*
tab. xlii. xliii.

† *Muller*, Pref. xxix.

‡ *Le Pekan*, tom. xiii. 304.

and in the white marks. It is also the animal which Mr. *Graban* sent to the Royal Society from *Hudson's Bay*, under the name of *Jackash*, which he says harbours about creeks, and lives on fish. Brings from two to four young at a time. Is caught by the natives, who eat the flesh and barter the skins.

29. VISON.

Hist. Quad. N° 205.—*Smellie*, vii. 307.

WEESF. With a long neck and body: short legs: head and body brown tinged with tawny: tail black: the down of a bright ash-color.

Length from head to tail one foot four inches, *French*; tail seven inches, or to the end of the hairs nine.

Inhabits *Canada*.

30. SABLE.

Hist. Quad. N° 201, and p. 328.—*Smellie*, vii. 309.
Mustela Zibellina, *Pallas Sp. Zool. fasc.* xiv. 54. tab.

WEESEL. With head and ears whitish: the ears broad, inclining to a triangular form, and rounded at top, in the *Asiatic* specimens; in the *American*, rather pointed: whole body of a light tawny: feet very large, hairy above and below: claws white.

Length, from nose to tail, twenty inches; of the trunk of the tail, four inches; from the base to the end of the hairs eight: of a dusky color.

PLACE.

This description is taken from a skin sent from *Canada*: but it extends across the whole continent, being frequently found among the furs which the *Americans* traffic with among the inhabitants of the

the *Tschuktschi Nofs* *. The *American* specimen, which I had opportunity of examining, was of the bleached, or worst kind; probably others may equal in value those of *Asia*.

The great residence of these animals is in *Asia*, beginning at the *Uralian* chain, and growing more and more plentiful as they advance eastward, and more valuable as they advance more north. None are found to the north-east of the *Anadir*, nor in any parts destitute of trees. They love vast forests, especially those of fir, in which those of most exquisite beauty are found. They are frequent in *Kamtschatka*, and are met with in the *Kuril* isles †. They extend from about lat. 50 to lat. 58.

They are very easily made tame: will attach themselves so to their master, as to wander a considerable way, and return again to their home. They abhor water: therefore the notion of their being the *Satherion* of *Aristotle* is erroneous.

Another way of taking them, besides those which I before mentioned in my History of Quadrupeds, is by placing a piece of timber from tree to tree horizontally; near one end of this is placed a bait: over the lower piece of wood is placed another, suspended obliquely, and resting at one end on a post very slightly: a rod extends from it to a noose, to which the bait is fastened. As soon as the Sable seizes the meat, the upper timber falls, and kills the precious animal ‡. The hunting season always begins with the first snows: but they are now become so very scarce, as to be confined to the vast forests of the extreme parts of *Siberia*, and to the distant *Kamtschatka*. Such has been the rage of luxury!

It was not till the later ages that the furs of beasts became an article of luxury. The more refined nations of antient times ne-

CAPTURE.

FURS WHEN
FIRST USED AS A
LUXURY.* *Doct. Pallas*.† *Descr. Kamtschatka*, 275.‡ *Voyages de Pallas*, ii. 319. tab. viii.—*Decouvertes dans le Ruffe*, &c. iv. 237. tab. vi. vii.

ver made use of them : those alone whom the former stigmatized as barbarians, were cloathed in the skins of animals. *Strabo* describes the *Indians* covered with the skins of Lions, Panthers, and Bears * ; and *Seneca* †, the *Scythians* cloathed with the skins of Foxes, and the lesser quadrupeds. *Virgil* exhibits a picture of the savage *Hyperboreans*, similar to that which our late circumnavigators can witness to in the cloathing of the wild *Americans*, unseen before by any polished people.

Gens effrena virum *Riphaeo* tunditur Euro ;
Et pecudum fulvis velantur corpora fetis.

Most part of *Europe* was at this time in similar circumstances. *Cæsar* might be as much amazed with the skin-dressed heroes of *Britain*, as our celebrated *Cook* was at those of his new-discovered regions. What time hath done to us, time, under humane conquerors, may effect for them. Civilization may take place, and those spoils of animals, which are at present essential for cloathing, become the mere objects of ornament and luxury.

I cannot find that the *Greeks* or old *Romans* ever made use of furs. It originated in those regions where they most abounded, and where the severity of the climate required that species of cloathing. At first it consisted of the skins only, almost in the state in which they were torn from the body of the beast ; but as soon as civilization took place, and manufactures were introduced, furs became the lining of the dress, and often the elegant facing of the robes. It is probable, that the northern conquerors introduced the fashion into *Europe*. We find, that about the year 522, when *Totila*, king of the *Visigoths*, reigned in *Italy*, that the *Suetbons* (a people of modern *Sweden*) found means, by help of the commerce of numberless intervening people, to transmit, for the use of the

* *Strabo*, lib. xvii. p. 1184.

† *Epist.* Ep. xc.

Romans,

Romans, *sapbilinas pelles*, the precious skins of the Sables*. As luxury advanced, furs, even of the most valuable species, were used by princes as lining for their tents: thus *Marco Polo*, in 1252, found those of the *Cham of Tartary* lined with Ermines and Sables†. He calls the last *Zibelines*, and *Zambolines*. He says that those, and other precious furs, were brought from countries far north; from the *land of Darkness*, and regions almost inaccessible, by reason of morasses and ice‡. The *Welsh* set a high value on furs, as early as the time of *Howel Dda*§, who began his reign about 940. In the next age, furs became the fashionable magnificence of *Europe*. When *Godfrey of Boulogne*, and his followers, appeared before the emperor *Alexis Comnene*, on their way to the *Holy Land*, he was struck with the richness of their dresses, *tam ex ostro quam aurifrigio et niveo opere barmelino et ex mardrino grisioque et vario*. How different was the advance of luxury in *France*, from the time of their great monarch *Charlemagne*, who contented himself with the plain fur of the Otter! *Henry I.* wore furs; yet in his distress was obliged to change them for warm *Welsh* flannel||. But in the year 1337, the luxury had got to such a head, that *Edward III.* enacted, that all persons who could not spend a hundred a year, should absolutely be prohibited the use of this species of finery. These, from their great expence, must have been foreign furs, obtained from the *Italian* commercial states, whose traffic was at this period boundless. How strange is the revolution in the fur trade! The north of *Asia*, at that time, supplied us with every valuable kind; at present we send, by means of the possession of *Hudson's Bay*, furs, to immense amount, even to *Turkey* and the distant *China*.

* *Jornandes de Rebus Geticis.*

† 160, 161, 162.

§ *Leges Wallicæ.*

‡ In *Bergeron's Coll.* 70.—*Purchas*, iii. 86.

|| *Barrington on the Statutes*, 4th ed. 243.

31. FISHER.

[Hist. Quad. N° 202.—*Smellie*, v. 207.—*LEV. MUS.*]

WEESEL. With ears broad, round, and dusky, edged with white: head and sides of the neck pale brown mixed with ash-color and black: hairs on the back, belly, legs, and tail, brown at the base, and black at their ends: sides of the body brown.

The feet very large and broad, covered above and below thickly with hair: on each foot are five toes, with white claws, sharp, strong, and crooked: the fore legs shorter than those behind: the tail is full and bushy, smallest at the end. Length, from nose to tail, is twenty-eight inches; of the tail seventeen.

This animal inhabits *Hudson's Bay*, and is found in *New England*, and as low as *Pensylvania*. About *Hudson's Bay* they are called *We-jacks*, and *Woodshocks*. They harbour about creeks, feed upon fish, and probably birds. They breed once a year, and have from two to four at a birth. The natives catch them, and dispose of the skins, which are sold in *England* for four or six shillings apiece. Such is the account I received from Mr. *Graham*.

The late worthy Mr. *Peter Collinson* transmitted to me the following relation, which he received from Mr. *Bartram*:—"They are found in *Pensylvania*; and, notwithstanding they are not amphibious, are called *Fishers*, and live on all kinds of lesser quadrupeds." I do not know how to reconcile these accounts of the same animal (for such it is) unless it preys indifferently on fish and land animals, as is often the case with rapacious beasts, and that both Mr. *Graham* and *Bartram* may have overlooked that circumstance.

Hist.

Hist. Quad. N° 207.—Smellie, v. 297.

32. STRIATED.

WEESEL. With small and rounded ears: the ground color of the whole animal black, marked on the back and sides with five long parallel lines of white; one extending from the head along the top of the back to the base of the tail; with two others on each side, the highest of which reaches a little way up the tail: the tail is long, and very bushy towards the end.

This species varies in the disposition of the stripes, and I suspect the male is entirely black, as described by *M. Du Pratz**, who says, that the female has rings of white intermixed. If that is the case, the *Coase*, which *M. de Buffon*† received from *Virginia*, is of this kind. It is of an uniform color; but what is a stronger proof of their differing only in sex, is the agreement in number of toes in the fore feet, there being four on each; an exception to the character of this Genus.

In size it is equal to an *European* Pole-cat, but carries its back more elevated.

These animals are found from *Pensylvania* as far as *Louisiana*, where they are known by the name of the Pole-cat ‡ or Skunk; which is given indifferently to both of these fœtid beasts.

Nature hath furnished this and the following a species of defence superior to the force either of teeth or claws. The *French* most justly call these animals *enfants du Diable*, or children of the Devil, and *Bêtes puantes*, or the stinking beasts; as the *Swedes* bestow on them that of *Fiskatta*. The pestiferous vapour which it emits from behind, when it is either attacked, pursued, or frightened, is so

* Vol. ii. 67. † xiii. *Coase*, p. 288.—*Le Conepute* (the female) *ibid.* tab. xxviii. xl. ‡ *Catesby*, ii. tab. 62.

suffocating

suffocating and foetid, as at once to make the boldest assailant retire with precipitation. A small space is often no means of security; the animal either will turn its tail, and by a frequent crepitus prevent all repetition of attempts on its liberty; or else ejaculate its stifling urine to the distance of eighteen feet*. Its enemy is stupefied with the abominable stench; or perhaps experiences a temporary blindness, should any of the liquid fall on his eyes. No washing will free his cloaths from the smell: they must even be buried in fresh soil, in order to be effectually purified.

Persons who have just undergone this misfortune, naturally run to the next house to try to free themselves from it; but the rights of hospitality are denied to them: the owner, dreading the infection, is sure to shut the door against them.

Professor *Kalm* ran the danger of being suffocated by the stench of one, which was pursued into a house where he was.

A maid-servant, who destroyed another in a room where meat was kept, was so affected by the vapour as to continue ill for several days; and the provisions were so infected, that the master of the house was forced to fling them away †.

Travellers are often obliged, even in the midst of forests, to hold their noses, to prevent the effects of its stench.

The brute creation are in like dread of its effluvia. Cattle will roar with agony; and none but true-bred dogs will attack it: even those are often obliged to run their noses into the ground before they can return to complete its destruction. The smell of the dogs, after a combat of this nature, remains for several days intolerable.

Notwithstanding this horrible quality, the flesh is eaten, and is esteemed as sweet as that of a Pig. The bladder must be taken out, and the skin flayed off, as soon as the animal is killed ‡.

* *Kalm*, i. 275.

† The same, 277.

‡ *Lawson*, 119.—*Kalm*, i. 278.

I should think it a very disagreeable companion: yet it is often tamed so as to follow its master like a Dog; for it never emits its vapour unless terrified *. It surely ought to be treated with the highest attention.

The skin is neglected by the *Europeans*, by reason of the coarseness of the hair. The *Indians* make use of it for tobacco pouches, which they carry before them like the *Higlanders*.

It climbs trees with great agility. It feeds on fruits † and insects. Is a great enemy to birds, destroying both their eggs and young. It will also break into hen-roosts, and destroy all the poultry ‡. It breeds in holes in the ground, and hollow trees, where it leaves its young, while it is rambling in quest of prey.

Hist. Quad. N° 218.—Smellie, v. 297.—LEV. MUS.

33. SKUNK.

WEESEL. With short rounded ears: sides of the face white: from the nose to the back extends a bed of white; along the top of the back, to the base of the tail, is another broad one of black, bounded on each side by a white stripe: the belly, feet, and tail, black. But the colors vary: that which is figured by *M. de Buffon* has a white tail: the claws on all the feet very long, like those of a Badger: the tail very full of hair.

This inhabits the continent of *America*, from *Hudson's Bay* § to *Peru* ||. In the last it is called *Chincbe*. It burrows like the former, and has all the same qualities. It is also found in *Mexico*, where it is called *Conepatl*, or *Boy's little Fox* ¶.

• *Kalm*. i. 278. † *Catesby*, ii. tab. 62. ‡ *Kalm*, i. 274. § Sent from thence by Mr. *Graham*. || *Feuillée Obs. Peru*, 1714, p. 272. ¶ *Hernandez, Mex.* 382.



- A. *Mustela nivalis*.—*Fennorum Nirpa Lumiko, Lumitirka, Nov. Ad. Acad. Reg. Scient. Suec. vi. 1785. p. 212.*—*Lappon. Seibbsch.*—*Ruffis Laska.*

W. With large canine teeth: body in summer grey, with a tincture of rufous: tail of the same color: belly white. Length from the tip of the nose to the base of the tail six inches and a half: tail an inch and a half. Shape of the Stoat.

Inhabits the north of *Finland* and *Lapland*. Lives during the summer in the forests; in winter frequents villages and houses. Feeds on mice, small birds, their eggs and young; eats also frogs. Is itself the prey of rapacious birds, and of the Ermine or Stoat. In winter changes to white, the whiskers, and a few hairs in the tail, excepted. Has not the foetid smell of the Weefel and Stoat. Is taken in traps baited with a mouse, or small bird. The skin is equal in price to that of the Ermine.—Professor *Retzius*.

HIST. QUAD. GENUS XXIV.

OTTER.

Hist. Quad. N° 226.—*Br. Zool.* i. N° 19.—*Smellie*, iv. 232.—*LEV. MUS.*

34. COMMON.

OTTER. With short rounded ears: head flat and broad: long whiskers: aperture of the mouth small: lips very muscular, designed to close the mouth firmly while in the action of diving: eyes small, and placed nearly above the corners of the mouth: neck short: body long: legs short, broad, and thick: five toes on each foot, each furnished with a strong membrane or web: tail depressed, and tapering to a point.

The fur fine; of a deep brown color, with exception of a white spot on each side of the nose, and another under the chin.

These animals inhabit as far north as *Hudson's Bay*, *Terra di Labrador*, and *Canada*, and as low south as *Carolina* and *Louisiana**; but in the latter provinces are very scarce. The species ceases farther south. *Lawson* says that they are sometimes found, to the westward of *Carolina*, of a white color, inclining to yellow. Those of *North America* are larger than the *European*, and the furs of such which inhabit the colder parts are very valuable. Their food is commonly fish; but they will also attack and devour the Beaver†.

They are found again in *Kamtschatka*, and in most parts of northern *Europe* and *Asia*, but not on the *Arctic* flats: are grown very scarce in *Russia*. The *Kamtschatkans* use their furs to face their

* *Lawson*, 119, and *Du Pratz*, ii. 69.† *Dobbs*, 40.

LESSER OTTER.

garments, or to lap round the skins of Sables, which are preserved better in Otter skins than any other way. They usually hunt them with dogs, in time of deep snow, when the Otters wander too far from the banks of rivers *.

The *Americans* round *Hudson's Bay* shoot or trap them for the sake of the skins, which are sent to *Europe*. They also use the skins for pouches, ornamented with bits of horn; and eat the flesh.

Otters are probably continued along the *Arctic* parts of *America*, westward; being found on the most eastern, or the greater *Fox Islands*, which are supposed to be pretty near to that continent.

35. MINX.

Lesser Otter, *Hist. Quad.* N° 228.

DESCRIPTION.

OTTER. With a white chin: rounded ears: top of the head in some hoary, in others tawny: the body covered with short tawny hairs, and longer of a dusky color: the feet broad, webbed, and covered with hair: the tail dusky, ending in a point. This animal is of the shape of the common Otter, but much smaller: its length being only twenty inches from head to tail; of the tail only four.

AMERICA.

It inhabits the middle provinces of *North America*, from *New Jersey* to the *Carolinas*. I did not discover it among the skins sent by Mr. *Graham* from *Hudson's Bay*; the animal described as one of this species differing from the many I have seen from the more southern colonies: yet possibly it may be found in a more northern latitude than that which I have given it, if the *Foutereaux*, an amphibious sort of little *Polecats* mentioned by *La Hontan*, be the same †.

* *Hist. Kamf.* 115, 116.

† i. 62.

It

It frequents the banks of rivers, inhabiting hollow trees, or holes which it forms near the water *. It has, like the Skunks, when provoked, a most excessively foetid smell. It lives much upon fish, frogs, and aquatic insects; dives admirably, and will continue longer under water than the Musk-beaver †: yet at times it will desert its watery haunts, and make great havoc in the poultry yards, biting off the heads of the fowls, and sucking the blood. At times it lurks amidst the docks and bridges of towns, where it proves a useful enemy to rats ‡.

It is besides very destructive to the Tortoise; whose eggs it scrapes out of the sand and devours: and eats the fresh-water muscles; whose shells are found in great abundance at the mouth of their holes. It is capable of being made tame, and domesticated §.

The species is spread in *Asia*, along the banks of the *Taik*, in the *Orenburg* government ||. None are seen in *Siberia*; but appear again near the rivers which run into the *Amur*. Its fur is in those parts very valuable, and esteemed as next in beauty to the Sable. It is either hunted with dogs or taken in traps. In *Europe* it is found in *Poland* and *Lithuania*, where it is named *Nurek*; and the *Germans* call it *Nurtz*. It is also an inhabitant of *Finland*: the natives call it *Ticburi*; the *Swedes*, *Mank* ¶, a name carried into *America* by some *Swedish* colonist, and with a slight variation is still retained.

ASIA.

EUROPE.

* *Kalm*, ii. 62. † Letter from Mr. Peter Collinson. ‡ *Kalm*, ii. 61.
§ *Larson*, 122. || *Dr. Pallas*. ¶ *Fauna Suec.* N° 13.

36. SEA.

Hist. Quad. N° 230.*Lutra Marina*, Kalan. *Nov. Com. Petrop.* ii. 367. tab. xvi.*Castor Marin*, *Hist. Kamtschatka*, 444.*Sea Otter*, *Muller*, 57. 58 *.—*LEV. MUS.*

DESCRIPTION.

OTTER. With hazel irides: upper jaw long, and broader than the lower: nose black: ears erect, conic, small: whiskers long and white: in the upper jaw six, in the lower four, cutting teeth: grinders broad: fore legs thick; on each four toes, covered with hair, and webbed: the hind feet resemble exactly those of a Seal: the toes divided by a strong shagreened membrane, with a skin skirting the external side of the outmost toe, in the manner of some water fowl.

The skin is extremely thick, covered closely with long hair, remarkably black and glossy; and beneath that is a soft down. The hair sometimes varies to silvery. The hair of the young is soft and brown.

SIZE.

The length, from nose to tail, is about three feet; that of the tail thirteen inches and a half. The tail is depressed, full of hair in the middle, and sharp-pointed. The weight of the biggest, seventy or eighty pounds.

PLACE.

These are the most local animals of any we are acquainted with, being entirely confined between lat. 49 and 60, and west longitude 126 to 150 east from *London*, in the coast and seas on the north-east parts of *America*; and again only between the *Kamt-*

* I here insert the synonyms; for in the Synopsis of Quadrupeds, following *Linnaeus* and *Biffon*, I confound the *Brazilian* Otter of *Marcgrave* with this animal.

schatkan

Sebatkan shores and the isles which intervene between them and *America*. They land also on the *Kuril* islands; but never are seen in the channel between the north-east part of *Siberia* and *America*.

They are most extremely harmless, and most singularly affectionate to their young. They will never desert them, and will even pine to death on being robbed of them, and strive to breathe their last on the spot where they experienced the misfortune.

MANNERS.

It is supposed that they bring but one at a time. They go between eight and nine months with young, and suckle it almost the whole year. The young never quits its dam till it takes a mate. They are monogamous, and very constant.

They bring forth on land: often carry the young between their teeth, fondle them, and frequently fling them up and catch them again in their paws. Before the young can swim, the old ones will take them in their fore feet, and swim about upon their backs.

They run very swiftly: swim sometimes on their sides, on their backs, and often in a perpendicular direction. They are very sportive, embrace each other, and kiss.

They never make any resistance; but endeavour, when attacked, to save themselves by flight: when they have escaped to some distance, they will turn back, and hold one of their fore feet over their eyes, to gaze, as men do their hands to see more clearly in a sunny day; for they are very dull-sighted, but remarkably quick-scented.

They are fond of those parts of the sea which abound most with weeds, where they feed on fish, sepia, lobsters, and shell-fish, which they comminute with their flat grinders.

They

CAPTURE.

They are taken different ways: in the summer, by placing nets among the sea-plants, where these animals retire in the frequent storms of this tempestuous coast.

They are killed with clubs or spears, either while they lie asleep on the rocks, or in the sea floating on their backs.

Thirdly, they are pursued by two boats till they are tired, for they cannot endure to be long at a time under water.

During winter they are brought in great numbers to the *Kurilian* islands, by the eastern winds, from the *American* shore.

The hunter goes with a dog, who points them. He knocks it on the head, and flays it, while the dog is beating about for another.

They are called in the *Kamtshatka* tongue *Kalan*, in the plural *Kalani*.

Their flesh is preferred to that of Seals by the natives; but the unfortunate crew who were shipwrecked in the expedition in 1741, under Captain *Bering*, found it to be insipid, hard, and tough as leather; so that they were obliged to cut it in small pieces before they could eat it. Others pretend, that the flesh of the young is very delicate, and scarcely to be distinguished from young lamb.

FUR.

But the valuable part of them is their skin. Few are brought into *Europe*; but great quantities are sold to the *Chinese*, at vast prices, from seventy to a hundred rubles apiece, or 14 or 25 *l.* sterling each. What a profitable trade might not a colony carry on, was it possible to penetrate to these parts of *North America* by means of the rivers and lakes! The access to *Pekin* would be then easy, by sailing up the gulph of *Petcheli*. At present, these valuable furs are carried by land above three thousand miles to the frontiers of *China*, where they are delivered to the merchants.

These

These animals partake very much of the nature of Seals, in their almost constant residence in the water, their manner of swimming, fin-like legs, and number of fore teeth. In their ears they greatly resemble the *little Seal* of my History of Quadrupeds, N° 386, and seem like animals which connect the genera of Otters and Seals.

They are seen very remote from land, sometimes even at the distance of a hundred leagues.



D I V. II. S E C T. II.

D I G I T A T E D Q U A D R U P E D S.

**Without CANINE TEETH: and with two CUTTING TEETH
only in each jaw.**

DIV. II. SECT. II. Digitated Quadrupeds.

Without CANINE TEETH: and with two CUTTING TEETH
only in each jaw.

Generally Herbivorous, or Frugivorous.

HARE.

HIST. QUAD. GENUS XXVI.

37. VARYING.

Hist. Quad. N° 242.—Alpine Hare, *Br. Zool.* i. N° 21.—*LEV. MUS.*

HARE. With the edges of the ears and tips black: the colors, in summer, cinereous, mixed with black and tawny: tail always white.

Mr. *Graham* says, that those of *Hudson's Bay* are of the same size with the common; but those which I have examined in *Scotland* are much less, weighing only six pounds and a half: the common Hare weighs upwards of eight.

This species inhabits *Greenland*, where alone they continue white throughout the year*; and are very numerous amidst the snowy mountains. They are usually fat; and feed on grass, and the white moss of the country. They are found about the rocks at *Churchill*, and the streights of *Hudson's Bay*; but are not common. They breed once a year, and bring two at a time†. They change their color to white at approach of winter. They are met with in

* *Crantz*, i. 70.—*Egede*, 62.

† Mr. *Graham*.

Canada

Canada and *Newfoundland*; after which the species ceases to the southward, or at least I have no authority for its being continued; the Hare of *New England* seeming, by *Jesselyn's* account, to be the following species.

The *Greenlanders* eat the flesh dressed, and the contents of the stomach raw. They use the excrements for wick for their lamps; and cloath their children with the soft and warm skins.

This species abounds from *Livonia* to the north-east part of *Siberia* and *Kamtschatka*; and from *Archangel* to *Saratof*, on the banks of the *Volga*, in east lat. 49. 52, and even farther into the *Orenburg* government. In *Siberia* they quit the lofty mountains, the southern boundaries of that country, and, collecting in flocks innumerable, at approach of winter migrate to the plains, and northern wooded parts, where vegetation and food abound. Mr. *Bell* met with them daily in their progress*. Multitudes of them are taken in toils by the country people, not for the sake of the flesh, but the skins; which are sent to *Petersburg*, and from thence exported to various parts.

American Hare, *Pb. Trans.* lxii. 4. 376.—*Hist. Quad.* N° 243.

38. AMERICAN.

HARE. With ears tip with grey: neck and body rusty, cinereous, and black: legs pale rust-color: belly white: tail black above, white beneath.

The distinctions between this and the common Hares and varying Hares are these:—They are less, weighing only from three pounds eight ounces to four pounds and a half: the length to the setting-on of the tail only nineteen inches. The hind legs are longer in proportion than those of the common Hare or *varying* Hare;

SIZE.

* *Travels*, octavo ed. i. 246.

the

SIZE OF A
VARYING HARE.

the length of this, from the nose to the tip of the hind legs, extended, being two feet five: of a *varying* Hare, measured at the same time, in *Hudson's Bay*, only two feet seven and a half; but from the nose to the tail was two feet: its weight seven pounds six ounces.

These animals are found from *Hudson's Bay* to the extremity of *North America*; but swarm in countries bordering on the former. In the time of *M. Jeremie*, who resided in *Hudson's Bay* from 1708 to 1714, twenty-five thousand were taken in one season*. At present they are a principal winter food to our residents there. They are taken in wire snares, placed at certain intervals in small openings made in a long extent of low hedging formed for that purpose; the animals never attempting to jump over, but always seek the gaps. These hedges are removed, on the falling of the snows, to other places, when the Rabbits seek new tracks†. Their flesh is very good; but almost brown, like that of the *English* Hare.

From *Hudson's Bay*, as low as *New England*, these animals, at approach of winter, receive a new coat, which consists of a multitude of long white hairs, twice as long as the summer fur, which still remains beneath. About the middle of *April* they begin to shed their winter covering.

From *New England* southward they retain their brown color the whole year. In both warm and cold climates they retain the same nature of never burrowing; but lodge in the hollow of some decayed tree, to which they run in case they are pursued. In the cultivated parts of *America*, they make great havoc among the fields of cabbage, or turnips‡. In *Carolina*, they frequent meadows and marshy places; and are very subject to have maggots breed in the skin§. In that province they breed very often, and even in the

* *Voyages au Nord*, iii. 344.

† *Drake*, i. 176.

‡ *Kalm*, ii. 46.

§ *Lawson*, 122.

A L P I N E H A R E.

III

winter months, and bring from two to six at a time; but usually two or four *.

I know of no use that is made of the skins, excepting that the natives of *Hudson's Bay* wrap them round the limbs of their children, to preserve them against the cold.

* * Without a tail.

Hist. Quad. N° 248.—Blackb. Mus.

39. ALPINE.

HARE. With short, broad, rounded ears: long head, and whiskers: fur dusky at the roots; of a bright bay near the ends; tips white: intermixed are divers long dusky hairs.

Length nine inches.

Found from the *Altaic* chain to lake *Baikal*, and from thence to *Kamtschatka*. They dwell amidst the snows of the loftiest and most dreadful rocky mountains, and never descend to the plains. They also are said to inhabit the farthest *Fox* or *Aleutian* islands: therefore possibly may be met with in *America*.

The manners are so amply described in my *History of Quadrupeds*, that I shall not repeat an account of them.

* *Doflor Garden.*

European,



A. European, *Br. Zool.* i. N° .—*Hist. Quad.* ii. N° .

The common *English* Hare is found in *Sweden*, and is perhaps the only kind in the southern part. Professor *Retzius* is of opinion, that it does not differ in species from the *Varying*, N° 37. I have given my reasons, in the *Tour to Scotland*, and my *History of Quadrupeds*, vol. II. p. 370, for differing from his respectable opinion.

In *Sweden* the common Hare is in summer of a dusky brown: in winter becomes cinereous. In that state, I have seen a brace sent over to *England*. In *Scania* they are twice as large as they are in the northern parts of *Sweden*, i. e. as those I call the *Varying*.

HIST.

HIST. QUAD. GENUS XXVII.

BEAVER.

Hist. Quad. N^o 251.—Smellie, v. 21.—LEV. MUS.

40. CASTOR.

DESCRIPTION.

BE A V E R. With a blunt nose: ears short, rounded, and hid in the fur: eyes small: very strong cutting teeth: hair of a deep chefnut brown: fore feet small, and the toes divided: hind feet large, and the toes webbed: the tail eleven inches long, and three broad; almost oval; flat, and covered with thin scales.

The usual length, from nose to tail, is about two feet four; but I have measured the skin of one, which was near three feet long.

Beavers vary in color. They are sometimes found of a deep black, especially in the north. In Sir *Ashton Lever's museum* is a specimen quite white. As they advance southward, the beauty of their fur decreases. Among the *Illinois* they are tawny, and even as pale as straw color*.

In *North America* these animals are found in great plenty all round *Hudson's Bay*, and as low as *Carolina* † and *Louisiana* ‡. They are not known in *East Florida* §. The species also ceases before it arrives in *South America*. To speak with precision, it commences in lat. 60, or about the river of Seals, in *Hudson's Bay*; and is lost in lat. 30, in *Louisiana*.

From *Hudson's Bay* and *Canada*, I can trace them westward to 120 degrees of longitude, as far as the tract west of *Lac Rouge*, or the Red lake ||. The want of discovery prevents us from know-

PLACE.

* *Charlevoix*, v. 140.
of *East Florida*, 50.

† *Larson*.
|| *Dobbs*, 35.

‡ *Du Pratz*, ii. 69.

§ *Account*

ing whether they are continued to the western extremity of this great continent opposite to *Asia*: probably they are, for the *Russian* adventurers got some of their skins on the isle of *Kadjak*, which the natives must have had from *America*. They certainly are not found in the islands of the new Archipelago; nor yet in *Kamtschatka**, by reason of the interruption of woods, beyond the river *Konyma*. From thence I doubt whether they are met with associated, or in a civilized state, nearer than the banks of the river *Jenesei*, or the *Konda*, and other rivers which run into the *Oby*: but they are found scattered in the woody parts of independent *Tartary*; also in *Casan*, and about the *Yaik*, in the *Orenburg* government. In the same unfociable state they inhabit *Europe*, and are found in *Russia*, in *Lapland*, *Norway*, and *Sweden*. The Beaver is extremely scarce in the lower part of *Sweden*. Mr. *Oedman* recollects but one instance, and that was in *Westrogothia*. It was so little known there, that the common people regarded it as a prodigy.

SAGACITY.

These are the most sagacious and industrious of animals. They live in society, and unite in their labors, for the good of the commonwealth they form. They erect edifices, superior in contrivance to the human beings. They usually live near, and shew a dexterity in their œconomy unequalled by the four-footed race.

DWELLINGS.

In order to form a habitation, they select a level piece of ground, with a small rivulet running in the midst. To effect their works, a community of two or three hundred assembles: every individual bears his share in the laborious preparation. Some fall trees of great size, by gnawing them asunder with their teeth, in order to form beams or piles; others are employed in rolling the pieces to the water; others dive, and scrape holes with their feet in order to fix them; and another set exert their efforts to rear them in their

LABORS.

* The Sea Beaver (as it is called) Sp. of this work, must not be confounded with this.

proper

proper places. A fifth party is busied in collecting twigs to wattle the piles. A sixth, in collecting earth, stones, and clay; others carry it on their broad tails to proper places, and with their feet beat and temper the earth into mortar, or ram it between the piles, or plaister the inside of the houses.

All these preparations are to form their dwellings within an artificial piece of water or pond, which they make by raising a dam across the level spot they had pitched on. This is done, first by driving into the ground stakes, five or six feet long, placed in rows, and securing each row by wattling it with twigs, and filling the interstices with clay, ramming it down close. The side next to the water is sloped, the other perpendicular. The bottom is from ten to twelve feet thick; the thickness gradually diminishes to the top, which is about two or three. The centre of the dam forms a segment of a circle; from which extends, on each side, a strait wing: in the midst of the centre is usually a gutter left for the waste water to discharge itself. These dams are often a hundred feet long, and nicely covered with turf.

The houses these wise animals make, are placed in the water collected by means of the dam, and are seated near the shore. They are built upon piles, and are sometimes round, sometimes oval; the tops are vaulted, so that their inside resembles an oven, their outside a dome. The walls are made of earth, stones, and sticks, and usually two feet thick. They are commonly about eight feet high above the surface of the water*, and are very neatly and closely plaistered on the inside. The floor is a foot higher than the water. The house, sometimes, has only one floor, which is strewn with leaves or moss, on which each Beaver lies in its proper place; at other times there are three apartments; one to lodge, another to

DAMS.

HOUSES.

* *Clerk*, i. 142.

eat in, and a third to dung in*: for they are very cleanly, and instantly cause the filth to be carried off by the inferior Beavers.

M. Du Pratz † says, that those of *Louisiana* form numbers of cells, and that each animal, or more probably each pair, possess one. He says, that he has seen no less than fifteen of these cells surrounding the centre of one house. He also acquaints us, that the Beavers of *Louisiana* are a third less than the brown sort; are covered with a cinereous down, which is covered with long silvery hairs.

MAGAZINES.

In each house are two openings; one towards the land, the other is within, and communicates with the water, for the convenience of getting to their magazine of provision in frosty weather. This office is formed so as to be beyond the thickness of the ice; for they lodge their provisions under the water, and dive and bring it into their house according as they want it.

FOOD.

Their food is laid in before winter by the tenants of each house; it consists of the bark and boughs of trees. *Lawson* says that they are fondest of the sassafras, ash, and sweet gum. In summer they live on leaves, fruits, and sometimes crabs and cray-fish; but they are not fond of fish.

NUMBER OF
HOUSES;

The number of houses in each pond is from ten to twenty-five: the number of animals in each, from two to thirty. They are supposed to associate in pairs; are therefore monogamous: another proof of their advances towards civilization.

OF INHABITANTS.

I think I have heard that every family consists of an even number. Sometimes the community, within the precinct of a dam, consists of four hundred; but I presume this must be in places little frequented by mankind.

They begin to build their houses, when they form a new settlement, in the summer; and it costs them a whole season to finish their work, and lay in their provisions.

* *Mr. Graham.—Catesby, App. xxx.*

† i. 241.

They

They are very attentive to their safety; and on any noise take to the water for their further security. They form vaults or burrows in the banks of the creek formed by the dam, into which they retreat in case of imminent danger.

They seem to be among quadrupeds, what Bees are among insects. They have a chief, or superintendant, in their works, who directs the whole. The utmost attention is paid to him by the whole community. Every individual has his task allotted, which they undertake with the utmost alacrity. The overseer gives a signal by a certain number of smart flaps with his tail, expressive of his orders. The moment the artificers hear it, they hasten to the place thus pointed out, and perform the allotted labor, whether it is to carry wood, or draw the clay, or repair any accidental breach.

They have also their centinels, who, by the same kind of signal, give notice of any apprehended danger.

They are said to have a sort of slavish Beaver among them (analogous to the Drone) which they employ in servile works, and the domestic drudgery*.

I have mentioned before their sagacity in laying in the winter provision. They cut the wood they prefer into certain lengths; pile them in heaps beneath the water, to keep them moist; and, when they want food, bite the wood into small pieces, and bring it into their houses. The *Indians* observe the quantity which the Beavers lay in their magazine at approach of winter. It is the Almanack of the Savages; who judge, from the greater or less stock, of the mildness or severity of the approaching season†.

The expedition with which they cut down trees, for the forming their dams, is amazing. A number surrounds the body, and will

OVERSEERS.

CENTINELS.

SLAVES.

THEIR WOOD HOW
CUT.* *Mr. Graham.*† *Charlevoix, v. 151.*

in a few minutes gnaw through a tree of three feet in circumference; and always contrive to make it fall towards the spot they wish *.

Beavers have in *America* variety of lakes and waters in which they might fix their seats; but their sagacity informs them of the precarious tenure of such dwellings, which are liable to be overthrown by every flood. This induces them to undertake their mighty and marvellous labors. They therefore select places where no such inconveniences can be felt. They form a dam to support a reservoir, fed only by a small rill; and provide for the overflow of the waste water by a suitable channel in the middle of their bank. They have nothing to fear but from land floods, or the sudden melting of the snows. These sometimes make breaches, or damage their houses; but the defects are instantly repaired.

During the winter they never stir out, except to their magazines of provision; and in that season grow excessively fat.

They are strongly attached to certain haunts, there being places which they will not quit, notwithstanding they are frequently disturbed. There is, says *Charlevoix*, a strong instance on the road between *Montreal* and lake *Huron*, which travellers, through wantonness, annually molest; yet is always repaired by the industrious inhabitants.

In violent inundations they are sometimes overpowered in their attempts to divert the fury of the water. In those cases they fly into the woods: the females return as soon as the water abates; the males continue absent till *July*, when they come back to repair the ravages made in their houses †.

Beavers breed once a year, and bring forth the latter end of winter; and have two or three young at a birth.

* *Catesby*, App. 30.

† *Charlevoix*, v. 151.

There is a variety of the Beaver kind, which wants either the sagacity or the industry of the others, in forming dams and houses. These are called *Terriers*. They burrow in the banks of rivers, and make their holes beneath the freezing depth of the water, and work upwards for a great number of feet. These also form their winter magazines of provision. Beavers which escape the destruction of a community, are supposed often to become *Terriers*.

TERRIER
BEAVERS.

Strange animal seen by Mr. *Phipps* and others in *Newfoundland*, of a shining black: bigger than a Fox: shaped like an *Italian* grehound: legs long: tail long and taper. One gentleman saw five sitting on a rock with their young, at the mouth of a river; often leapt in and dived, and brought up trouts, which they gave to their young. When he shewed himself, they all leapt into the water, and swam a little way from shore, put their heads out of the water and looked at him. An old furrier said, he remembered a skin of one sold for five guineas. The *French* often see them in *Hare Bay*.

Beavers have, besides man, two enemies; the Otter, and the Wolverine; which watch their appearance, and destroy them. The last is on that account called, in some parts of *America*, the *Beaver-eater*. They are very easily overcome; for they make no resistance: and have no security but in flight.

THEIR ENEMIES.

It is not wonderful that such sociable animals should be very affectionate. Two young Beavers, which were taken alive and brought to a neighbouring factory in *Hudson's Bay*, were preserved for some time; and throve very fast, till one of them was killed by an accident. The survivor instantly felt the loss, began to moan, and abstained from food till it died*.

* *Drake's Voy.* i. 151.

They

HOW TAKEN.

They are taken several ways: sometimes in log-traps, baited with poplar sticks, laid in a path near the water. The *Indians* always wash their hands before they bait the traps, otherwise the sagacious animal is sure to shun the snare.

Sometimes they are shot, either while they are at work, or at food, or in swimming across the rivers. But these methods are used only in summer, and not much practised; for the skins in that season are far less valuable than in the winter. At that time they are taken in nets placed above and below their houses, across the creeks, on stakes. If the water is frozen, the ice is cut from shore to shore, in order to put down the stakes. When the net is set, the *Indians* send their women to the Beaver-houses to disturb the animals; who dart into the water, and are usually taken in the net, which is instantly hauled up; and put down again with all expedition. If the Beaver misses the net, it sometimes returns to its house, but oftener into the vaults on the sides of the banks; but the poor creature seldom escapes, being pursued into all his retreats, the houses being broke open, and the vaults searched by digging along the shores.

The value of the fur of these animals, in the manufacture of hats, is well known. It began to be in use in *England* in the reign of *Charles I**, when the manufacture was regulated, in 1638, by proclamation; in which is an express prohibition of using any materials except *Beaver stuff*, or *Beaver wool*; and the hats called demi-castors were forbidden to be made, unless for exportation.

This caused a vast increase of demand for the skins of the Beavers. The *Indians*, on the discovery of *America*, seem to have paid very little attention to them, amidst the vast variety of beasts they at that time possessed, both for food and cloathing. But

* *Rymer's Fœdera*, xx. 230.

about

about the period of the fashion of hats, they became an article of commerce, and object of chase. The southern colonies soon became exhausted of their Beavers; and of later years the traffic has been much confined to *Canada* and *Hudson's Bay*. The importance of this trade, and the ravages made among the animal creation in those parts, will appear by the following state of the imports into the ports of *London* and *Rochelle* in 1743. I take that year, as I have no other comparative state:

Hudson's Bay company sale, begun *November* 17th 1743.

26,750	Beaver skins.
14,730	Martins.
590	Otters.
1,110	Cats, i. e. Lynx.
320	Fox.
600	Wolverenes.
320	Black Bears.
1,850	Wolves.
40	Woodshocks, or Fishers.
10	Minx.
5	Raccoon.
120	Squirrels.
130	Elks, i. e. Stags.
440	Deer.

Imported into *Rochelle* in the same year.

127,080	Beavers.
16,512	Bears.
110,000	Raccoon.
30,325	Martins.
12,428	Otters and Fishers.
1,700	Minx.
1,220	Cats.

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R

1,267 Wolves.

M U S K.

1,267 Wolves.

92 Wolverenes.

10,280 Grey Foxes and Cats.

451 Red Foxes.

This great balance in favor of the *French* arises not only from their superior honesty in their dealings with the ignorant *Indians*, but the advantageous situation of *Canada* for the fur trade. They had both sides of the river *St. Lawrence*; the country round the five great lakes; and the countries bordering on the rivers flowing into them; and finally, the fine fur countries bordering on the *Hudson's Bay* company, many of whose waters falling into the *St. Lawrence*, gave an easy conveyance of those commodities to *Montreal*; where a fair is annually kept, with all the savage circumstances attendant on *Indian* concourse.

The traffic carried on in *Hudson's Bay* is chiefly brought from the chain of lakes and rivers that empty themselves into the bay at *Nelson's* river, running southerly from lat. 56 to lat. 45. Lake *Pachegoia* is the most northerly: there the *Indians* rendezvous in *March*, to make their canoes for the transportation of the furs; for at that season the bark of the birch-tree separates very easily from the wood.

41. MUSK.

Hist. Quad. N° 252.—*Smellie*, v. 260.

BE A V E R. With a thick nose, blunt at the end: ears short, hid in the fur: eyes large: body thick, and in form quite resembles that of the *Beaver*; its color, and that of the head, a reddish brown: breast and belly cinereous, tinged with rust-color: the fur is very soft and fine.

The

The toes on every foot are distinct and divided: those of the hind feet fringed on both sides with stiff hairs or bristles, closely set together: tail compressed, and thin at the edges, covered with small scales, with a few hairs intermixed.

Length, from nose to tail, one foot: of the tail nine inches.

These animals are in some parts of *America* called the Little Beaver, on account of its form, and some parts of its œconomy. From its scent it is styled the Musk Rat, and Musquash. The *Hurons* call it *Ondatbra*; from which *M. de Buffon* gives it the name of *Ondatra* *.

It is found from *Hudson's Bay* to as low at least as *Carolina* †. Like the Beaver, it forms its house of a round shape, covered with a dome, and constructed with herbs and reeds cemented with clay. At the bottom and sides are several pipes, through which they pass in search of food; for they do not lay in a stock of provision, like the former. They also form subterraneous passages, into which they retreat whenever their houses are attacked.

These houses are only intended for winter habitations: are deserted, and rebuilt annually. During summer, they live in pairs, and bring forth their young from three to six at a time. At approach of winter, they construct their houses and retire into them, in order to be protected from the inclemency of the season. Several families occupy the same dwelling, which is oft-times covered many feet with snow and ice; but they creep out and feed on the roots which lie beneath. They are very fond of the *Acorus Verus*, or *Calamus Aromaticus* ‡. This perhaps gives them that strong musky smell these animals are so remarkable for; which they lose during winter, probably when this species of plant is not to be got. They also feed on the fresh-water Mussels. They feed too on fruit; for *Kalm*

* x. 12.

† *Lawson*, 120.

‡ The same.

says, that apples are the baits used for them in traps. We may add, that in winter they eat the roots of nettles, and in summer, strawberries and raspberries*, during which time it is rare to see the male and female separate.

The flesh is sometimes eaten. The fur is made use of in the manufacture of hats. The Musk-bag is sometimes put among cloths, to preserve them from worms or insects.

These animals, as well as the Beaver, seem to have their *Terriers*, or some which do not give themselves the trouble of building houses, but burrow, like Water-rats, in banks adjacent to lakes, rivers, and ditches†, and often do much damage, by admitting the water through the embankments of meadows. They continue in their holes, except when they are in the water in search of food. They make their nests with sticks, placing a lining of some soft materials within‡. *Charlevoix* § adds, that they sometimes make use of a hollow tree for their residence.

When taken young, they are capable of being tamed; are very playful and inoffensive, and never bite.

* *Charlevoix*, v. 158.
§ v. 158.

† *Kalm*, ii, 56, and *Charlevoix*.

‡ *Kalm*, ii. 58.

HIST. QUAD. GENUS XXVIII.

PORCUPINE.

Hist. Quad. N° 257.—LEV. MUS.

42. CANADA.

PORCUPINE. With short ears, hid in the fur: hair on the head, body, legs, and upper part of the tail, long, soft, and of a dark brown color; but sometimes found white: on the upper part of the head, body, and tail, are numbers of strong sharp quills; the longest, which are those on the back, are three inches long; the shortest are towards the head and on the sides, and concealed in the hair; mixed with them are certain stiff straggling hairs, at least three inches longer than the others, tipped with dirty white: the under side of the tail is white.

On each fore foot are four toes; on the hind five; all armed with long claws, hollowed on the under side.

The size of one, which Sir JOSEPH BANKS brought from *Newfoundland*, was about that of a Hare, but more compactly made; the back arched; and the whole form resembling that of the Beaver: the tail is six inches long, which, in walking, is carried a little bent upwards.

This species inhabits *America*, from *Hudson's Bay* to *Canada**, *Newfoundland*, *New England*, and, but rarely, as far south as *Virginia*†. *Lawson* makes no mention of it among the animals of *Carolina*. *Du Pratz*‡ says, it loves the cold, and is found on the banks of the *Illinois*. It may therefore be ranked among the local northern animals.

* *Charlevoix*, v. 198.† *Catesby*, *App.* xxx.

‡ ii. 68.

They

CANADA PORCUPINE.

They are found in great plenty about *Hudson's Bay*, where the trading *Indians* depend much on them for food. They are reckoned excellent eating, even by the *Europeans*, tasting, when roasted, like sucking-pig. The bones, during winter, are of a greenish yellow, owing, as is supposed, to their feeding during that season on the bark of the pine. It is observed, that the bones of animals sometimes take a tincture from their diet; for example, those of beasts which feed on madder become red*. The *Caqua*, or *Canada* Porcupine, feeds much on the bark of pines or juniper: it is their food the greatest part of the year, and the buds of willows their chief support the rest. In walking it drags its tail along the ground. *Indians* discover them by the track they make, but chiefly by the unbarked trees. In summer, they live on the wild fruits, and lap water, but will not go into it. In winter, take snow by way of beverage.

They nestle under the roots of great trees, and will also, in quest of fruits, ascend the boughs. When the *Indians* discover one in a tree, they cut it down, and kill the animal by a blow on the nose.

They defend themselves with their quils. They fly from their pursuer; but when they cannot escape, will sidle towards their enemy, in order to push their quils into him: they are but weak instruments of offence; for a small stroke with the hand against the grain will bring them from the skin, leaving them sticking slightly in the flesh. The *Indians* use them to make holes in their noses and ears, for the placing their nose and ear-rings, and other finery †. They also trim the edges of their deer-skin habits with fringes of dyed quils ‡, or make pretty linings with them for the bark boxes.

* *Phil. Trans.* lxi. 374.

† *Drage's Voy.* i. 177.

‡ The same, 191.

They

They are very indolent animals, sleep much, and seldom travel a mile from their haunts *.

M. de Buffon gives two figures of this beast, under the name of *Le Coendou* and *L'Urson*. The first he makes an inhabitant of *Brasil*: the last, of *Hudson's Bay*: but the *Coendou* is a very different animal †. The two figures he has exhibited are of our Porcupine in the winter and summer dress, the hair growing thinner as the warm season approaches ‡. His *Coendou* shews it in the first state, his *Urson* in the second §.

They are said to copulate in *September*, and to bring only one young, the first week in *April*; another, which it brings forth, being always dead ||.

* *Mr. Graham.*

† See *Syn. Quad.* N°

‡ *Eaw. Hist. Birds*, i. 52.

§ *Hist. Nat.* xii. tab. liv. lv.

|| *Mr. Graham.*

QUEBEC AND MARYLAND MARMOT.

MARMOT.

HIST. QUAD. GENUS XXIX.

43. QUEBEC.

Hist. Quad. N° 259.*Mus empetra*, PALLAS, *Nov. Sp. Quad. fasc. i.* 75.

MARMOT. With short rounded ears: blunt nose: cheeks swelled, and of a cinereous color: end of the nose black: top of the head chefnut: the hair on the back grey at the bottom, black in the middle, and the tips whitish: the belly and legs of a deep orange, or a bright ferruginous color.

Toes black, naked, and quite divided: four toes, with the rudiments of another, on the fore feet, five on the hind feet: tail short, dusky, and full of hair.

The specimen which I saw formerly at Mr. *Brook's*, alive, appeared larger than a Rabbit; but the specimen in the Royal Society's Museum* was only eleven inches long from nose to the tail, and the tail three inches. This probably was a young one.

The *Wenusk*, or *Quebec* Marmot, feeds on coarse grass. It burrows in the earth in a perpendicular manner. The *Indians* take it by pouring water into the holes, which forces it out.

44. MARYLAND.

Hist. Quad. N° 260.—*Smellie*, iv. 346.

MARMOT. With prominent dark eyes: short rounded ears: nose sharper-pointed than that of the last, and of a cinereous color: head and body of a brown color, which is lighter on the

* *Phil. Trans.* lxii. 378.

fides,

sides, and still more so on the belly: the legs and feet dusky: toes long, and divided: claws long, and sharp: tail dusky, and bushy; half the length of the body: a specific distinction from the other kinds.

Size of a Rabbet.

Inhabits the temperate and warm parts of *North America*, from *Pensylvania* to the *Babama Islands*. It feeds on fruits, berries, and vegetables. In the provinces it inhabits the hollows of trees, or burrows under ground, sleeping for a month together. The *European* species continues dormant half the year: whether it takes a long sleep in the warm climate of the *Babamas* I am uncertain. It dwells there among the rocks, and makes its retreat into the holes on the approach of the hunters. In those islands it is very fond of the berries of the *Ebretia Bourreria*, called there *Strong Back*. The flesh is reckoned very good, but resembles more that of a Pig than a Rabbet*.

It is called there the *Babama Coney*. By Mr. *Edwards*, who figures one from *Maryland*, the *Monax*; or Marmot of *America* †.

Hist. Quad. N° 261.—*LEV. MUS.*

45. HOARY.

MARMOT. With the tip of the nose black: ears short, and oval: cheeks whitish: crown dusky and tawny: hair in all parts rude and long; on the back, sides, and belly, cinereous at the bottoms, black in the middle, and tipped with white, so as to spread a hoariness over the whole: legs black: claws dusky: tail full of hair, black and ferruginous.

Size of the preceding.

Inhabits the northern parts of *North America*.

* *Catechy Carol.* ii. 79.—*App.* xxviii.

† *Hist. Birds*, ii. 104.

TAIL-LESS AND EAR-LESS MARMOT.

- A. 45. **BLACK MARMOT.** With the tip of the nose whitish: face, brown and hoary: tail, six inches long: hair on the body short; and of a full black: palms naked beneath. Size of a Rabbet.

Described from a skin in the *Hudson's Bay* house. Inhabits the interior parts of the country, and said to be rare.

46. TAIL-LESS.

Hist. Quad. N^o —LEV. MUS.

MARMOT. With short ears: color of the head and body a cinereous brown: the extremities and the hairs white: two cutting teeth above, four below: no tail.

About the size of the common Marmot.

Inhabits *Hudson's Bay*.

47. EAR-LESS.

Hist. Quad. N^o 263.—*Smellie*, viii. 234.

MARMOT. Without ears: face cinereous: back, and hind part of the head, of a light yellowish brown; sometimes spotted distinctly with white, at others undulated with grey: belly and legs of a yellowish white: tail about four inches and a half long. Length, from nose to tail, about nine and a half. But there is a pygmy variety wholly yellow, and with a short tail, frequent near the salt lakes, between the mouths of the *Taik* and the *Jemba*.

Inhabits *Bobemia*, *Austria*, and *Hungary*, and in the *Russian* empire; begins to be common about the *Occa*, east of *Moscow*; extends over all the temperate and open parts of *Siberia*, and about *Jakutsk*, and in *Kamtschatka*. It is also on the island of *Kadjak*, and was seen in great numbers by *Steller* on *Schamagin's* isles, almost close on the shore of *North America*, which give it place in this part of the work.

They

They burrow, and sink the pipes to their retreats obliquely, and then winding; and at the end is an arched oblong chamber, a foot in diameter, strewed with dried grass. The entrances, or pipes, of the males are of greater, and those of the females of lesser, diameters. Towards winter they make a new pipe to their nest, but that only reaches to the turf; and with the earth which is taken out they fill up the summer pipe.

They live entirely in a state of solitude, unless in the amorous season, when the females are found in the same burrows with the males; but they bring forth in their own burrows, and by that means prevent the males from destroying the young, as they cannot enter by reason of the narrowness of the pipes, the males being superior in size to their mates. They sleep all night; but in the morning quit their holes, especially in fine weather, and feed and sport till approach of night. If the males approach one another, they fight sharply. The females often set up a very sharp whistle; the males are, for the most part, silent. At the sight of a man, they instantly run into their burrows; and are often seen standing upright, and looking about them, as if on the watch: and if they spy any body, give a loud whistle, and disappear.

They are very easily tamed, and become very sportive and amusing; and are very fond of being stroked and cherished. In this state they will eat grain, and many sorts of herbs. In a wild state they prey on mice, and small birds, as well as vegetables. *Gmelin* says, that in *Siberia* they inhabit granaries; but I do not find it confirmed by *Doctor Pallas*. *Gmelin* adds, that those who frequent granaries, seek for prey during the whole winter*: as to the others, they certainly remain torpid all the severe season, and revive on the melting of the snows.

* *Voyage en Sibirie*, i. 378.

They bring forth from three to eight at a time. The young grow very quick, and desert the maternal burrows in the summer.

Their enemies are all sorts of Weefels, which dig them out of their holes. More males than females perish, as the latter are fiercer, and defend themselves much better. During day they are snatched up by hawks and hungry crows.

In some places they are taken in snares, for the sake of their skins, which are usually sent to *China*. The *Kamtschatkans* make most elegant garments and hoods of them; specimens of the latter are preserved in the *Leverian Museum*. In *Siberia* their flesh is esteemed a great delicacy, especially in autumn, when they are a lump of fat.

The *Russians* call them *Suslik*; the *Siberians*, *Jevrascha*, and *Jemuranka*; the *Kamtschatkans*, *Syræth*.



A. BOBAK, *Hist. Quad.* N° 262.—*Smellie*, vii. 198.

MARMOT. With short oval thick ears: small eyes: upper part of the body greyish, mixed with long black and dusky hairs, tipped with grey: throat rust-colored: rest of the body and inside of the limbs yellowish rust: four claws on the fore feet, and
a short

a short thumb furnished with a strong claw: five toes behind: tail short, slender, and full of hair. Length sixteen inches: of the tail five.

Inhabits in great plenty *Kamtschatka, Sibiria, Tartary, the Ukraine, and Poland.*

Its manners most amply described in the History of Quadrupeds.

HUDSON SQUIRREL.

SQUIRREL.

HIST. QUAD. GENUS XXX.

N. B. The ears of the *American* Squirrels have no tufts.

48. HUDSON.

Hudson's Bay Squirrel, *Hist. Quad.* N^o 274.—LEV. MUS.

SQUIRREL. Of a ferruginous color, marked along the top of the back with a line of a deeper hue: belly of a pale ash-color, mottled with black, and divided from the sides by a dusky line: tail shorter and less bushy than that of the *European* kind; of a rust-color, barred, and sometimes edged with black.

Inhabits the pine-forests of *Hudson's Bay* and *Labrador*: live upon the cones: keep in their nests the whole winter. Are found as high as the Copper river; yet do not change their colors by the severity of the winter, like the *Petits gris* of northern *Europe* and *Asia*, from which they form a distinct species. I know of only one exception in change of color in those of *America*, Sir *Astton Lever* being possessed of a specimen of a milky whiteness; but he did not know from what part of the continent it came.

α. *Carolina* *. With the head, back, and sides, grey, white, and ferruginous, intermixed: belly white: the color divided from that of the sides by a rust-coloured line: lower part of the legs red: tail brown, mixed with black, and edged with white.

Both these are rather less than the *European* Squirrels.

* Lesser Grey Squirrel, *Hist. Quad.* p.

Hist.

Hist. Quad. N° 272.—*Smellie*, v. 321.—*LEV. MUS.*

49. GREY.

SQUIRREL. With hair of a dull grey color, intermixed with black, and frequently tinged with dull yellow: belly white. But they vary, the body being sometimes of a fine uniform grey.

This is the largest of the genus, and grows to half the size of a Rabbet.

In *America* I do not discover this animal farther north than *New England**; from whence they are found in vast numbers as far south as *Louisiana*†. These, and the other species of Squirrels, are the greatest pests to the farmers of *North America*. They swarm in ferveral of the provinces, and often descend in troops from the back settlements, and join the rest in their ravages on the plantations of mayz, and the various nuts and mast which that fertile country produces.

Those which migrate from the mountains generally arrive in autumn; instantly clear the ground of the fallen acorns, nuts, and mast, and form with them magazines for their winter provisions, in holes which they dig under ground for that purpose. They are often robbed of their hoards; for the colonists take great pains to find them out; and oft-times the hogs, which rove about the woods, root up and devour their magazines. It is from these that they supply themselves, from time to time, with provisions, quitting their nests, and returning with a sufficient stock to last them for some space; it being observed, that during winter they do not care to quit their warm retreat, unless on a visit to their storehouses; therefore, whenever they are observed to run about the woods in greater

* *Josselyn's Voy.* 86.

† *Bossu*, i. 361.

numbers

GREY SQUIRREL.

numbers than usual, it is a certain sign of the near approach of severe cold; for instinct directs them to lay in a greater stock than usual, least the inclemency of the weather should deprive them of access to their subterraneous magazines.

The damage which they do to the poor planters, by destroying the mayz, is incredible. They come by hundreds into the fields, climb up the stalks, and eat the sweet corn wrapt up in the heads, and will destroy a whole plantation in a night. For this reason they were proscribed. In some places the inhabitants were, each, obliged annually to bring in four Squirrels heads. In others, a sum was given, about three pence, for every one that was killed. This proved such an encouragement, as to set all the idle people in the province in pursuit of them. *Pensylvania* paid, from *January* 1749 to *January* 1750, 8000*l.* currency: but on complaint being made by the deputies, that their treasuries were exhausted by these rewards, they were reduced to one half. How improved must the state of the *Americans* then be, in thirty-five years, to wage an expensive and successful war against its parent country, which before could not bear the charges of clearing the provinces from the ravages of these insignificant animals!

It has been observed, that the Squirrels are greatly multiplied within these few years, and that in proportion to the encrease of the fields of mayz, which attract them from all parts; I mean not only the grey species, but all the others.

They are eaten by some people, and are esteemed very delicate. Their skins, in *America*, are used for ladies shoes; and are often imported into *England*, for lining or facing for cloaks.

They make their nests in hollow trees, with moss, straw, wool, and other warm materials. They chiefly inhabit trees of the deciduous kind; but sometimes in pines, whose cones are an article of their provision. They keep their nests for several days together,
feldom

feldom stirring out, except for a fresh supply of food. Should a deep snow prevent them from getting to their storehouses, multitudes perish with hunger.

When they are sitting on a bough, and perceive a man, they instantly move their tails backward and forward, and gnash their teeth with a very considerable noise. This makes them detested by the sportsmen, who lose their game by the alarm they give. The GREY Squirrel is a difficult animal to kill: it sits on the highest trees, and often between the boughs, and changes its place with such expedition that the quickest marksman can scarcely find time to level his piece; and if it can once get into a hole, or into any old nest, nothing can provoke it to get out of its asylum. They run up and down the bodies of trees, but very rarely leap from one to the other.

They are easily made tame; will even be brought to play with cats and dogs, which in a state of domesticity will not hurt them. They will also attach themselves so far as to follow children to and from the woods.

They agree in their manner of feeding with the *European* kinds; and have all the same sort of attitudes.

SQUIRREL. With coarse fur, mixed with dirty white and black: the throat, and inside of the legs and thighs, black: the tail is much shorter than is usual with Squirrels, and of a dull yellow, mixed with black: in size equal to that of the Grey.

β. CAT.

Inhabits *Virginia*. Mr. Knaphan, in whose collection I found it, informed me, that the planters called it the *Cat Squirrel*.

I suspect that this animal is only a variety. *Larwson** says, that he has seen the Grey species pied, reddish, and black; but this

* *Hist. Carol.* 124.

BLACK SQUIRREL.

- point must be determined by natives of the countries which they inhabit, who, from observation, may decide by their manners, or their colors, in different seasons, or periods of life.

50. BLACK.

Hist. Quad. N° 273.—Brown's Zoology, tab. xlvii.—LÉV. Mus.

SQUIRREL. With white ears, nose, and feet: the body totally black: the tail black, tip with white: in size equal to the former.

These sometimes vary: there being examples of individuals which are wholly destitute of any white marks. The beautiful figure of one of these animals from *East Florida*, in Mr. *Brown's Zoology*, has ears edged with white, and a much longer tail than usual.

Inhabits neither *Hudson's Bay* nor *Canada*, but is found in most other parts of *America*, as far as *Mexico* *. It is equally numerous, and as destructive to the mayz as the Grey Squirrel, but breeds and associates in troops separate from that species †; yet makes its nest in the same manner, and like it forms magazines of provision against the severe season.

In *Mexico*, and probably in other parts of *America*, they eat the cones of pine-trees; and lodge in the hollows of the trees.

* Is the *Quaubteballotliltic*, or *Tlilacotequillin*, of the *Mexicans*. *Fernandez*, 8.

† *Catsby*, ii. 73.

A. With

A. With membranes from leg to leg.

Hist. Quad. N° 283.—*Smellie*, v. 307.—*LEV. MUS.*

51. FLYING.

SQUIRREL. With large black eyes: round and naked ears: a membrane, covered with hair, extending from the fore to the hind legs: the hairs on the tail disposed flatways on each side: are long in the middle, short towards the end, which tapers to a point: that and the body of a brownish cinereous: the belly white, tinged with yellow.

Inhabits all parts of *North America*, and as low as *Mexico*, where it is called *Quimichpatlan* *. The natives of *Virginia* named it *Affapantic* †.

They live in hollow trees. Like the *Dormouse*, they sleep the whole day; but towards night creep out, and are very lively and active. They are gregarious, numbers being found in one tree. By means of the lateral membranes, they take prodigious leaps, improperly called flying; and can spring ten yards at an effort. When they would leap, they extend the hind legs, and stretch out the intervening skin, which producing a larger surface, makes the animals specifically lighter than they would otherwise be: even with all this advantage, they cannot keep in a strait line, but are urged downward with their weight. Sensible of this, they mount the tree in proportion to the distance of the leap they propose to take, lest they should fall to the ground before they had reached a place of security.

* *Fernand. Nov. Hisp.* 8.

† *Smith's Virginia*, 27.

HOODED SQUIRREL.

They never willingly quit the trees, or run upon the ground, being constant residents of the branches. They go in troops of ten or twelve, and seem in their leaps, to people unaccustomed to them, like leaves blown off by the wind.

They bring three or four young at a time. They use the same food, and form their hoards like other Squirrels.

They are very easily tamed, and soon grow very familiar. They seem of a tender nature, and to love warmth, being very fond of creeping to the sleeve or pocket of the owner. If they are flung down, they shew their dislike to the ground, by instantly running up and sheltering themselves in his cloaths.

52. HOODED.

Hist. Quad. N° 284.

SQUIRREL. With the lateral skins beginning at the ears, uniting under the chin, and extending, like those of the former, from fore leg to hind leg: the ears naked, and rather long: the hairs on the tail disposed horizontally.

The color of the upper part of the body reddish: the lower part cinereous, tinged with yellow.

This species, according to *Seba*, who is the only person who has described or figured it, came from *Virginia**. *Linnaeus* is very confused in his synonyms of this and the former kind; that of *Mr. Edwards* refers to the other species; and that of *Seba*, in his article of *Sciurus Volans*, to both †.

* *Seb. Mus. i. tab. xlv. p. 72.*

† *Syst. Nat. 85*, where he calls it *Mus Volans*; and *p. 88*, where he styles it *Sciurus*.

It

SEVERN RIVER SQUIRREL.

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It is singular that there should be only one specimen ever brought of this species; from a country we have had such great intercourse with. It may perhaps be a monstrous variety, by the extent of the skin into a sort of hood. As to color, that is an accidental difference, which happens to numbers of other animals.

Hist. Quad. N° 282.

Greater Flying Squirrel, *Pb. Tr.* lxii. 379.

53. SEVERN
RIVER.

SQUIRREL. With the hair on the body and sides of a deep cinereous color at the bottom; the ends ferruginous: breast and belly of a yellowish white: the whole coat long and full: the tail thick of long hairs, disposed in a less flattened manner than those of the *European* kind; brown on the upper side, darkest at the end; the lower part of the same color with the belly: the lateral skin, the instrument of flight, disposed from leg to leg, in the same manner as in the first species, N° 51.

In size it is far superior to the common Flying Squirrel, being at least equal to the *English* kind.

This species is found in the southern parts of *Hudson's Bay*, in the forests of the country bordering on *Severn river* in *James's bay*.

COMMON,



A. COMMON, *Hist. Quad.* N° 266.—*Smellie*, iv. 268.—*LEV. Mus.*

SQUIRREL. With tufted ears: head, body, and legs, ferruginous: breast and belly white: tail reddish brown.

This species inhabits the northern world, as high as *Lapmark*; is continued through all the Arctic countries, wheresoever wood is found; abounds throughout *Siberia*, except in the north-east parts, and in *Kamtschatka*, where it ceases, by reason of the cessation of forests.

In all these countries they are red in summer, but at approach of winter change to various and elegant greys. Their furs are of exquisite softness, and are the sorts known to us by the name of *Petit Gris*. In the more southerly parts of these cold climates, they retain a tinge of the summer red, and are less valuable. The change of color is effected gradually, as is its return in spring to its ferruginous coat.

It is very singular, that the alteration is not only performed in the severity of the open air, but even in the warmth of a stove. Dr. *Pallas* made the experiment on one which was brought to him on the 12th of *September*, and was at that time entirely red. About the 4th of *October* many parts of the body began to grow hoary; and at the time it happened to die, which was on the 4th of *November*,

vember, the whole body had attained a grey color, and the legs, and a small part of the face, had alone the reddish tinge*.

The varieties are as follow:—A blackish one, with the fur footy tipt with red, and full black glossy tail, are common about lake *Baikal*, and the whole course of the *Lena*. Sir *Ashton Lever* is in possession of one of a jetty blackness, with a white belly: its ears, as well as those of all the *Petit Gris*, are adorned with very long tufts. These change in winter to a lead-color, and are taken in the thick *Alpine* forests, where the *Pinus Cembra*, or Stone Pines, abound. The skins of these are neglected by the *Chinese*, but greatly esteemed in *Europe*, especially the tails, for facings of dresses.

This variety is observed sometimes to migrate in amazing numbers from their lofty alpine abodes, compelled to it whenever there happens to be a scarcity of provision†. Swarms have appeared even in the town of *Tomsk*, in deserted houses, and in the towers of the fortifications; where numbers are taken alive, and of great size, by the children of the place.

A beautiful and large variety, about the *Baraba*, called the *Teleutian*, is in great esteem for its beautiful grey color, like a Gull's back, with a silvery gloss, and finely undulated. Their summer color is usually dusky red, and the sides and feet black. These are highly esteemed by the *Chinese*, and sell at the rate of 6 or 7*l.* sterling per thousand‡.

A small variety of this, lesser even than the common kind, is met with about the neighbourhood of the *Kasym* and *Iset*.

A variety is also met with which change to a white color; and others again retain a white color both in winter and summer.

* *Nov. Sp. Quad.* 373.

† *Nov. Sp. an.* 188.

‡ *Mem. Ruff. Asiat.* vii. 124.

EUROPEAN FLYING SQUIRREL.

The late navigators to the Icy sea brought home with them from *Pulo Condor*, a knot of islands in north lat. 8. 40. on the coast of *Cambodia*, a Squirrel totally black.

B. EUROPEAN FLYING SQUIRREL, *Hist. Quad.* N° 285.—*Smellie*, v. 307.—*LEV. Mus.*

SQUIRREL. With naked ears: flying membranes extending from the middle of the hind legs to the base of the fore feet, and spreading there in a rounded sail: tail full of hair, and round at the end: color of the upper part of the body a fine grey, like that of a Gull's back: the lower part white.

Length to the tail four inches and a quarter; of the tail, five.

Inhabits the birch-woods of *Finmark*, *Lapland*, *Finland*, *Lithuania*, and *Livonia*. Is found in *Asia*, in the woods of the *Uralian* chain, and from thence to the river *Kolyma*. Nests in the hollows of trees remote from the ground, where it makes its nest of the softest mosses. Is always solitary, except in the breeding-season, and never appears in the day-time. Lives on the buds and catkins of the birch, and on the shoots and buds of pines, which give its juices a strong resinous smell; and its excrements will burn strongly with a pitchy scent. The last are always found at the root of the tree, as if the animal descended to ease nature. It seldom comes out in bad weather; but certainly does not remain torpid during winter; for it is often taken in the traps laid for the Grey Squirrels. The skins are often put up in the bundles with the latter, so that the purchaser is defrauded, as their fur is of no value. They leap at vast distances from tree to tree, and never descend but for the purpose before mentioned. By reason of similitude of color between them and the birch bark, they are seen with great difficulty, which preserves them from the attacks of rapacious birds.

They

EUROPEAN FLYING SQUIRREL

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They bring forth two, three, and rarely four, young at a time. When the parent goes out for food, she laps them carefully up in the moss. They are very difficult to be preserved, and seldom can be kept alive, by reason of want of proper food. They are born blind, and continue so fourteen days. The mother pays them great attention; broods over them, and covers them with its flying membrane. The *Russians* call them *Ljetaga*, or the *Flying*.

DORMOUSE.

HIST. QUAD. GENUS XXXI.

54. STRIPED.

Ground Squirrel, *Hist. Quad.* N° 286.—*Smellie*, v. 329.—*LEV. MUS.*

DORMOUSE. With naked rounded ears: the eyes full and black; about them a whitish space: the head, body, and tail, of a reddish brown, deepest on the last: from neck to tail a black line extends along the top of the back: on each side run two others, parallel to the former, including between them another of a yellowish white: breast and belly white: the toes almost naked, and of a flesh-color; long, slender, and very distinct; four, with the rudiment of a fifth, on the fore feet; five perfect toes on the hind.

SIZE.

The length is about five inches and a half; of the tail, to the end of the hairs, rather longer.

Inhabits all parts of *North America*, I think, from *Hudson's Bay* to *Louisiana*; certainly from *Canada*, where the *French* call them *Les Suisses*, from their skins being rayed with black and white, like the breeches of the *Switzers* who form the Pope's guard*.

They are extremely numerous: live in woods, yet never run up trees, except when pursued, and find no other means of escape. They live under ground, burrow, and form their habitations with two entrances, that they may secure a retreat through

* *Charlevoix*, v. 198.

the one, in case the other should be stopped. These little animals form their subterraneous dwellings with great skill, working them into the form of long galleries, with branches on each side, every one terminating in an enlarged apartment, in which they hoard their stock of winter provision*. Their acorns are lodged in one, in a second the mayz, in a third the hickery-nuts, and in the last their most favorite food, the *Cbinquaquin*, or chesnut. Nature has given to them, as to the *Hamster* †, a fine conveniency for collecting its provisions, having furnished them with pouches within their cheeks, which they fill with mayz, and other articles of food, and so convey them to their magazines.

Those of *Siberia* live chiefly on seeds, and particularly on the kernels of the *Cembra*, or Stone Pine; and these they hoard up in such quantities, that ten or fifteen pounds of the most choice have been found in a single magazine ‡.

They pass the whole winter either in sleep or in eating. During the severe season, they very rarely stir out, at least as long as their provisions last; but if by an unexpected continuance of bad weather their provisions fail, they will then fall out, and dig under ground in cellars where apples are kept, or into barns where mayz is stored, and make great devastations. They will even enter houses, and eat undismayed, before the inhabitants, any corn they chance to meet with §. The Cat makes great havock among them, being at all seasons as great an enemy to them as to domestic Mice. It is hunger alone that tames them. They are naturally of a very wild nature, will bite most severely, and cannot by any means be rendered familiar.

* *Kalm*, i. 322. 325.

† *Hist. Quad.* N° 324.

‡ *Pallas, Nov. Sp. an.*

379.—*Voy. de Pallas*, ii. 292.

§ *Du Pratz*, ii. 68.

STRIPED DORMOUSE.

They are remarkably nice in the choice of their food, when the variety of autumnal provisions gives opportunity. They have been observed, after having stuffed their pouches with the grains of rye, to fling it out when they meet with wheat, and to replace the rye with the more delicious corn.

Their skins form a trifling article of commerce, being brought over among *le menue pelliterie*, the small furs, and used for the lining of ladies cloaks.

In *Siberia* they are killed with blunt arrows, or caught in fall-traps. About the *Lena*, the boys go out in the amorous season of these little animals, and, standing behind a tree, mimic the noise of the females, which brings the males within reach of their sticks, with which they kill them. The skins are sold to the *Chinese* merchants. About the *Lena*, a thousand of their skins are not valued at more than six or eight rubles*.

These animals are found in great numbers in *Asia*, beginning about the river *Kama* †, and from thence growing more and more frequent in the wooded parts of *Siberia*; but these, and all the species of Squirrel, cease towards the north-east extremity of the country, by reason of the interruption of woods, which cuts them off from *Kamtschatka*.

* *Pallas, Nov. Sp. an.* 380.

† A river falling into the *Volga* about forty miles below *Casan*.

Dormouse, *Br. Zool.* i. N° 234.—*Hist. Quad.* N° 289.—*Smellie*, iv. 334.—*LEV. MUS.* 55. ENGLISH?

Mr. *Lawson* says that the *English* Dormouse is found in *Carolina*; but it has not as yet been transmitted to *Great Britain*. In order to ascertain the species, I add a brief description.

DORMOUSE. With full black eyes: broad, thin, semi-transparent ears: throat white: rest of the body and the tail of a tawny red. Size of the common Mouse; but the body of a plumper form, and the nose more blunt: tail two inches and a half long, covered on every side with hair.

In *Europe*, inhabits thickets; forms its nest at the bottom of a tree or shrub; forms magazines of nuts for winter food; sits up to eat, like the Squirrel; lies torpid most of the winter, in its retreat, rolled up into the shape of a ball; retires to its nest at approach of cold weather.

RAT.

HIST. QUAD. GENUS XXXIII.

56. BLACK.

Br. Zool. i. N° 25.—Hist. Quad. N° 297.—Smellie, iv. 275.—Lév. Mus.

RAT. With head and body of a very deep iron grey, nearly black: belly ash-colored: legs almost naked, and dusky: a claw instead of a fifth thumb on the fore feet. Length, from nose to tail, seven inches; tail near eight.

Inhabits *North America*, not only the settled parts, but even the rocks of the *Blue mountains**, remote from all human dwellings. There they live among the stones, and in the subterraneous grottos frequent in those hills. They lie close during day, but at night come out, and make a most horrible noise amidst these *American* alps. In violent frosts they lie torpid; and in the inhabited parts of the country they are observed to redouble their screams before severe weather, as if they had some presage from their constitutions.

By Mr. *Bartram*'s observations it appears very certain, that these animals are natives of *America*. They are found even at present in the most desolate places, as well as in the houses and barns of the inhabited parts. It is unknown in *Europe*, that either the common Rat or Mouse ever deserted the haunts of mankind, for rocks and deserts: they therefore have been there from the earliest times. It is likely, that if ever the *Blue mountains* become inhabited, the wild Rats will quit their rocks, and resort to those places

* *Bartram*, as quoted by Mr. *Kalm*, ii. 47.

where

BROWN AND AMERICAN RAT.

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where they find harvested food, and will quickly become perniciously domestic.

We are positively told; that *South America* was free from these troublesome animals, till they were introduced there from *Europe*, by the means of ships, in 1544*.

We find none of the species in *Kamiscbatka*, nor any where to the east of the *Urallian* chain. *America* must therefore have been stocked with them from the side of *Europe*. They are very common in *Russia*. Towards *Asiatican* they are very small, but of the same color with the others.

Br. Zool. i. N° 26.—Hist. Quad. N° 298.—Smellie, iv. 336.—LEV. Mus.

57. BROWN.

RAT. Above, light brown mixed with tawny, dusky, and cinereous: below, of a dirty white: four toes before, and a claw instead of a fifth toe.

I have no authority for giving this species a place here: but must suppose that the new world could not possibly escape the pest, as it is universally become a most destructive inhabitant of *European* ships.

Hist. Quad. N° 299.

Characho, Jike Cholqomac, or Great Mouse of the Monguls.—LEV. Mus.

58. AMERICAN.

RAT. With the upper jaw extending very far beyond the lower: ears large and naked: tail rather shorter, in proportion, than that of the Black, to which it is rather superior in size: color a dusky brown.

The specimen, from which this description is taken, was sent

* *Garcilasso de la Vega, 384.*

from

WATER RAT AND MOUSE.

from *North America* to *Sir Ashton Lever*; but I am not informed, whether it only frequented the deserts, or infested houses.

59. WATER.

Br. Zool. N° 300.—*Hist. Quad.* N° 300.—*Smellie*, iv. 290.—*LEV. MUS.*

RA.T. With small eyes: ears covered with the fur: teeth yellow: body covered with long hairs, black mixed with a few of a rust-color: belly of a deep grey.

Length of the head and body seven inches; tail five, covered with short black hairs. Weight nine ounces.

Inhabits *North America*, from *Canada* to *Carolina**. In the first, varies to tawny and to white†: feeds on the fry of fish, insects, shell-fish, frogs, and roots; burrows on the banks of ponds and rivers; and dives and swims as well as an Otter, notwithstanding it is not web-footed.

In northern *Europe* and *Asia* it is extremely common; from *Petersburgh* to *Kamschatka* in *Siberia*, they are twice as large as in other places. They are found also from *Lapland* to the *Caspian* sea, and also in *Persia*; and are one of the animals which endure the cold of the Arctic circle.

60. MOUSE.

Br. Zool. i. N° 30.—*Hist. Quad.* N° 301.—*Smellie*, iv. 282.—*LEV. MUS.*

THIS common animal needs no description. It is very abundant in the inhabited parts of *America*‡, and is to be found from *Petersburgh* perhaps as far as *Kamschatka*.

Kalm imagines them to be natives of *America*; for he assures us

* *Larsson Carolina*, 122.

† *De Buffon*, xiv. 401.

‡ *Kalm*, ii. 46.

that

that he has killed them in the crevices of the rocks in desert places, far from the haunt of man*.

Hist. Quad. N° 302. a. AMERICAN.—*Smellie*, iv. 285.—*LEV. MUS.*

61. FIELD.

RAT. With great, naked, and open ears: cheeks, space below the ears, and sides quite to the tail, orange-colored: back dusky and rust-colored, marked along the top, from head to tail, with a dark line: throat, breast, and belly, of a pure white: tail dusky above, white beneath: feet white: hind legs longer than those of the *English* kind.

Length about four inches and a half; of the tail, four inches.

Inhabits *Hudson's Bay* and *New York*.

Hist. Quad. N° 307.

62. VIRGINIAN.

RAT. With a black nose: fur short, and in all parts white: limbs slender: tail very thick at the base, tapering to a point, and cloathed with long hair.

Seba alone, vol. i. p. 76. tab. xlvii. fig. 4, describes this species.

Hist. Quad. N° 295.]

63. LABRADOR.

RAT. With a blunt nose: mouth placed far below: upper lip bifid: ears large, naked, rounded: fore legs short, furnished with four toes, and a tubercle instead of a thumb: HIND LEGS long and naked, like some of the *ferboas*: toes long, slender, and distinct; the exterior toe the shortest: thumb short.

* *Kalm*, ii. 47.

HUDSON'S AND MEADOW RAT.

SIZE.

The whole length of the animal is eight inches, of which the tail is four and three quarters.

COLORS.

Color above a deep brown, beneath white, separated on each side by a yellow line.

Inhabits *Hudson's Bay* and *Labrador*. Sent over by Mr. *Graham*.

* * With short tails.

64. HUDSON'S.

Hist. Quad. N° 319.—*LEV. MUS.*

RAT. With soft long hair, dusky at the bottom, whitish brown at the points: along the middle of the back, from head to tail, runs a dusky line: sides yellowish: belly and inside of the thighs of a dirty white.

Legs very short: on the toes of the fore feet of the male only are four very large and sharp claws, tuberculated beneath; in the female smaller and weaker: on the hind feet five toes with slender claws.

Tail not three quarters of an inch long, terminating with long stiff hairs; it is scarcely visible, being almost lost in the fur.

Described from a skin which Doctor *Pallas* favored me with, which he received from the *Labrador* coast.

This is nearly a-kin to the *Lemmus*.

65. MEADOW?

Short-tailed Field Mouse? *Br. Zool.* i. N° 31.—*Hist. Quad.* N° 322 ?—*Smellie*, iv. 293.—*LEV. MUS.*

RAT. With a blunt nose: great head: prominent eyes: ears buried in the fur: head and upper part of the body of a ferruginous brown mixed with black: belly of a deep ash-color.

Length,

HARE-TAILED AND ŒCONOMIC RAT.

155

Length, from head to tail, six inches; tail only one and a half, with a small tuft at the end.

Inhabits *Hudson's Bay* and *Newfoundland*, in the last very numerous, and does vast damage in the gardens; resides under ground.

Hist. Quad. N° 320.

66. HARE-TAILED.

RAT. With small and rounded ears: head broad; color dusky and tawny brown: the belly of a dirty white: a dusky line passes from between the eyes, and extends obscurely along the back. Larger than the common Mouse. Described from so mutilated a specimen, sent to the Royal Society from *Hudson's Bay**, that it was impossible to determine the species; only, by the dark line along the back, it seemed likest the HARE-TAILED, an inhabitant of *Siberia*, whose manners are described in the History of Quadrupeds.



A. ŒCONOMIC, *Hist. Quad.* N° 313.—*Descr. Kamtschatka*, Fr. ed. 392.

RAT. With naked ears, usually hid in the fur: small eyes: teeth tawny: limbs strong: color, an intermixture of black and yellow, darkest on the back: under side hoary.

* *Pb. Tr. lxi.* 379. Sp. 15.

X 2

Length

Length four inches and a quarter, to the tail; the tail one inch.

Inhabits in vast abundance *Siberia*, from the east side of the *Uralian* chain, even within the Arctic circle, and quite to *Kamtschatka*. It is the noted *Tegultschitch* of that country, distinguished by its curious œconomy and by its vast migrations.

They make their burrows with the greatest skill, immediately below the surface of the soft turfy soil. They form a chamber of a flattish arched form, of a small height, and about a foot in diameter, to which they sometimes add as many as thirty small pipes or entrances. Near the chamber they often form other caverns, in which they lodge their winter stores: these consist of various kinds of plants, even some of species poisonous to mankind. They gather them in summer, harvest them, and even at times bring them out of the cells to give them a more thorough drying in the sun. The chief labor rests on the females. The males, during summer, go about solitary, and inhabit some old nests; and in that season never touch their hoards, but live on berries. They are monogamous, and the male and female at other times found in the same nest. The female brings two or three young at a time, and breeds often in the year.

No little animals are so respected by the *Kamtschatkans* as these, for to them they owe a delicious food; and with great joy, about autumn, rob the hoards, and leave there many ridiculous presents by way of amends: they also never take the whole of their provisions, and leave besides a little dried ovaries of fish for their support.

MIGRATIONS.

But the migrations of these Mice, in certain years, is as extraordinary a fact as any in natural history: I will only mention those of *Kamtschatka*. The cause is unknown. Doctor *Pallas* thinks it may arise from the sensations of internal fire in that volcanic tract, or a prescience of some unusual and bad season. They gather together
in

in the spring in amazing numbers, except the few that are conversant about villages, where they can pick up some subsistence. This makes it probable that the country is over-stocked, and they quit it for want of food. The mighty host proceeds in a direct course westward, and with the utmost intrepidity swims over rivers, lakes, and even arms of the sea : many are drowned, many destroyed by water-fowl, or rapacious fish ; those which escape rest awhile, to bask, dry their fur, and refresh themselves. If the inhabitants find them in that situation, they treat them with the utmost tenderness, and endeavour to bring them to life and vigor. As soon as they have crossed the river *Penschim*, at the head of the gulph of the same name, they turn southward, and reach the rivers *Judoma* and *Ochot* by the middle of *July*. The space is most surprising, on consulting the map of the country. The flocks are also so numerous, that an observer has waited two hours to see them all pass. Their return into *Kamtschatka*, in *October*, is attended with the utmost festivity and welcome. The natives consider it as a sure prognostic of a successful chase and fishery : the first is certain, as the Mice are always followed by multitudes of beasts of prey. They equally lament their migration, as the season is certainly filled with rains and tempests.

B. RED, *Hist. Quad.* N^o 314.

RAT. With bristly nose and face : ears oval, rising above the hair, naked, only tipped with fur : color, from forehead to rump, a bright red : sides light grey and yellow : belly whitish : tail dusky above, light below.

Length not four inches ; tail more than one.

Grow

L E M M U S R A T.

Grow very common beyond the *Oby*, and live scattered over all *Siberia*, in woods and mountains, and about villages; extend even to the Arctic circle. It is the *Tjebetanaustschu*, or *Red Mouse* of the *Kamtchatkans*. It is a sort of drone: makes no provision for itself, but robs the hoards of the last species*. Lives under logs of trees; frequents houses; dares the severest weather, and is abroad amidst the snows; feeds on any thing, and is often caught in the traps set for Ermines, in attempting to devour the bait.

C. LEMMUS, *Hist. Quad.* N° 317.—Godde Saeppan, *Leems*, 224.

RAT. With small eyes and mouth: upper lip divided: ears small, placed far backwards: four slender toes on the fore feet, and a sharp claw, like a cock's spur, in place of a thumb: skin very thin. Color of the head black and tawny, of the belly yellow.

Length of those of *Scandinavian Lapland*, above five inches; those of the *Russian* dominions not four.

The manners and wonderful migrations of the *Lemmi* of *Europe*, have been fully treated of in my History of *Quadrupeds*.

They abound in the countries from the *White Sea* to the gulph of the *Oby*, and in the northern end of the *Urallian* chain; but differ in size and color from those of *Europe*. Like them, they migrate at certain periods; and tend from the *Urallian* mountains, sometimes towards *Jenesei*, sometimes towards *Petzorah*, and at those times rejoice the *Samoieds* with a rich chase of the animals which pursue the wanderers. The *Samoieds* assert, that the Rein-Deer will greedily devour them; perhaps they take them medicinally, as Sheep are known as greedily to seek and swallow Spiders.

* *Descr. Kamtschatka*, 392.

D. LENA,

D. LENA, *Mus Gmelini*, Pallas, *Nov. Sp. an.* 195.

RAT. With short round ears: white whiskers: thick broad body, in all parts nearly of equal breadth: tail short, thickly covered with rude hairs: five toes on the fore feet, with claws very strong and white: four on the hind feet, with claws much weaker: the fur pretty long; three parts of its length, from the roots, cinereous, the rest white; so that the animal appears entirely white, except the cheeks, which are ash-colored, and the chin, which is dusky.

The length is three inches one-fifth, the tail four-fifths of an inch.

They are seen in great numbers in autumn, on the borders of the Icy Sea, and about the parts of the *Lena* that fall into it. They appear suddenly, and depart as expeditiously. They feed on the roots of mosses, and are themselves the food of *Arctic* Foxes. Perhaps they extend to the *Jenesai*: for it is said that there are two sorts of Mice found there; one wholly white; the other black, yellow, and white, which perhaps is the *Lemmus* *.

E. RINGED, *Hist. Quad.* N° 205.

RAT. With a blunt nose: ears hid in the fur: hair very fine: claws strong and hooked: color of the upper part, sometimes ferruginous, sometimes light grey undulated with deep rust-color: a crescent of white extends on each, from the hind part of the head towards the throat, bounded on each side by a bed of rust-color.

• *Nov. Sp. an.* 197.

Length

Length to the tail little more than three inches; tail one, terminated by a bristly tuft.

Found in the *Arctic* neighborhood of the *Oby*. Makes its nest with rein-deer and snowy liver-worts, just beneath the turfy surface. Are said to migrate, like the *Lemmus*.

F. TCHELAG, *Descr. Kamtschatka*, 392.

THE author of the description of that great peninsula says no more than that it is a very small species; frequents houses; and will go out and eat boldly any thing it has stolen. The natives call it *Tchelagatchitch*.

H I S T.

HIST. QUAD. GENUS XXXIX.

SHREW.

Br. Zool. i. N° 32.—Hist. Quad. N° 341.—Smellie, iv. 305.

67. FOETID ?

SHREW. With the head and upper part of the body dusky : sides of a brownish rust-color : eyes very small, almost hid in the fur : ears short : nose very long and slender : upper mandible extends far beyond the lower.

Inhabits *Hudson's Bay*, and probably *Carolina*, as *Lawson* mentions a Mouse found there which poisons Cats * if they eat it. It is a notion in *England* that they are venomous ; it is notorious that our Cats will kill, but not feed on them ; probably those of *America* have the same instinct : so that their deaths in the new world must arise from some other cause, and be falsely attributed to these animals.

Mr. *Graham* sent over two other specimens, besides that described. They were of a dusky grey above, and of a yellowish white beneath : their size, rather less than the *English* kind ; one being only two inches and a quarter long, the other only two inches ; but they seemed not to differ specifically from the other.

The common Shrew is found in *Russia* ; in all parts of *Siberia*, even in the *Arctic* flats ; and in *Kamtschatka*.

• Hist. Carolina, 125.

MOLE.

HIST. QUAD. GENUS XXXV.

68. LONG-TAIL-
ED.*Hist. Quad.* N° 352.—*LEV. MUS.*

MOLE. With two cutting teeth in each jaw, and two sharp slender canine: the grinders small and sharp: nose long, the end radiated with short tendrils: fore feet not so broad as those of the *English* Mole, furnished with very long white claws: toes on the hind feet quite separated: body not so thick and full as that of the common species: hair long, soft, and of a rusty brown: tail covered with short hair.

Length of the body four inches two-tenths; of the tail, two and a half.

Inhabits *North America*. Received from *New York*.

69. RADIATED.

Hist. Quad. N° 351.—*Smellie*, iv. 316.—*LEV. MUS.*

MOLE. With a long nose, radiated like the former: the body shorter, and more full: hair dusky, very long, fine, and compact: fore feet resembling those of the preceding; but the toes of the hind feet are closely connected.

Length to the tail three inches three quarters: the tail slender, round, and taper, one inch three-tenths long.

Received from *New York*.

This

This species forms subterraneous passages in the fields, running in various directions, and very shallow. Their course may be traced by the elevation of the earth on the surface, in form of a little bank, two inches high, and as broad as a man's hand. These holes are unable to support any weight, so that walkers find it very troublesome to go over places where these animals inhabit, the ground perpetually breaking under their feet *.

These Moles have all the strength in their legs as those of *Europe*, and work in the same manner. They feed on roots, are very irascible, and will bite very severely.

MANNERS.

Hist. Quad. N° 353.—LEV. MUS.

70. BROWN.

MOLE. With a long and very slender nose: two broad cutting teeth in the upper, four sharp and slender in the lower, jaw; the two middlemost short: the grinders very numerous, strong, sharp, and separate: the fore feet very broad; those and the hind feet exactly like those of the *European* kind.

Length about six inches; tail one.

I received two specimens of this animal from *New York*. The hair in both soft, silky, and glossy: the hair in each dusky at the bottom; but in one, the ends were of a yellowish brown: in the other, brown: the feet and tail of both were white. I suspect that they were varieties of the kind described by *Seba* †, which he got from *Virginia*: it was totally black, glossed over with a most resplendent purple. I may here note, the Tail-less Mole, figured by *Seba* in the same plate, is not a native of *Siberia*, as he makes it; but is an inhabitant of the *Cape of Good Hope*.

PLACE.

* *Kalm*, i. 190.† *P.* 51. tab. xxxii.

These three species agree pretty nearly with the Shrew in the fore teeth; for which reason *Linnaeus* classes the two he describes among the *Sorices*. I call them Moles from their shape, which differs not from the *European* kind; but those who chuse to be very systematic, may divide the genus of Shrews, and style these *Sorices Talpiformes*.



A. EUROPEAN, *Hist Quad.* ii. N^o *Br. Zool.* i.

MOLE. With six cutting teeth in the upper; eight in the lower jaw; and two canine teeth in each: color of the fur black.

PLACE.

Inhabits *Sweden*; but does not extend farther than the south of *Norway*, where it is called *Vond*. Is frequent in the temperate parts of *Russia*, and even in *Siberia*, as far as the *Lena*. In *Siberia* it is twice as big as those of *Europe*. Is found there milk-white, but more usually so in the *Verchoturian* mountains.

HEDGE-

HEDGE-HOG, *Hist. Quad.* GENUS XXXVI.B. COMMON, *Hist. Quad.* ii. N° 355.—*Br. Zool.* i. N°

HEDGE-HOG. With nostrils bounded on each side by a loose flap: ears rounded: back covered with prickles, white, barred with black: face, sides, and rump, with strong coarse hair: tail an inch long.

Is found in *Sweden*. In the diocese of *Aggerbuys*; and in that of *Bergen* in *Norway**. It is called, in the *Norwegian* tongue, *Buf-tedyvel*. Is common in *Russia*, except in the extreme northern and southern parts. None in *Siberia*, or very scarce at least.

PLACE.

* *Leem*, 229.—*Pontoppidan*, ii. 28.

D I V. III.

PINNATED QUADRUPEDS,

Or, with FIN-LIKE FEET.

D I V. III. Pinnated Quadrupeds;
Or, with FIN-LIKE FEET.

WALRUS.

HIST. QUAD. GENUS XLI.

71. ARCTIC.

Hist. Quad. N° 373.—*Phipps's Voy.* 184.*Rosmarus, Zimmerman*, 330.*Le Tricheque, Schreber*, ii. 82. tab. lxxix.*Cheval Marin, Hist. Kamtschatka*, 427.—*Smellie*, vii. 354.—*Lev. Mus.*

DESCRIPTION.

WALRUS. With a round head; short neck; small and fiery eyes, sunk a finger's depth in the sockets, and retractile from external injuries *: mouth very small; lips very thick, beset above and below with great whiskers, composed of bristles, transparent, and thick as a straw: instead of ears are two minute orifices, placed in the most distant part of the head.

Body is very thick in the middle, lessening gradually towards the tail. The skin in general is an inch thick, and two about the neck †, and much wrinkled about the joints: it is covered with short hair, of a mouse-color; some with reddish, others with grey; others are almost bare, as if they were mangy, and full of scars ‡.

The legs are very short; on each foot are five toes, connected by webs, with a small blunt nail to each. The hind feet, like those of

* *Crantz*, i. 126.

† The same, 125.

‡ *Marten's Spitzberg.*

Seals,

Seals, are very broad: the tail is very short: the penis two feet long, and of a bony substance.

In the upper jaw are two very long tusks, bending downwards. No cutting teeth; but in each jaw, above and below, four grinders, flat at top, and the surfaces of those which I examined much worn. The length of the largest tusk I have heard of, was two feet three inches, *English* measure, the circumference at the lower end, eight and a half; the greatest weight of a single tusk twenty pounds: but such are rarely found, and only on the coasts of the *Icy* sea, where they are seldom molested, and of course permitted to attain their full growth*.

The Walrus is sometimes found of the length of eighteen feet, and the circumference, in the thickest part, ten or twelve. The weight from fifteen hundred to two thousand pounds.

Inhabits, in present times, the coasts of the *Magdalene* islands, in the gulph of *St. Laurence*, between latitude 47 and 48, their most southerly residence in any part of the globe. They are not found on the seas of *Labradore*. The *Eskimaux* purchase the teeth, for the heading their Seal-darts, from the *Indians* of *Nuckvank*, about lat. 60; who say, that they are annually visited in the winter by multitudes of these animals†. They are found in *Davis's Straights*, and within *Hudson's Bay*‡, in lat. 62. They also inhabit the coast of *Greenland*. I am uncertain whether they frequent *Iceland*; but they are found in great numbers near the islands of *Spitzbergen*, and on all the floating ice from thence to *Cherry Isle*, a solitary spot intermediate between the last and the most northerly point of *Norway*. In 1608, they were found there in such numbers, huddled on one another, like hogs, that a ship's crew killed above nine hundred in seven hours time§.

TEETH.

SIZE.

PLACE.
AMERICA.SPITZBERGEN.
CHERRY ISLE.* *Hist. Kamtschatka*, 120.† *Ph. Transf.* lxiv. 378.‡ *Ellis's Voy.* 80.§ *Martens Spitzberg.* 182.

NORWAY.

If they are found in the seas of *Norway*, it is very rare * in these days. *Leems*, p. 316, says that they sometimes frequent the sea about *Finmark*; but about the year 980, they seemed to have been so numerous in the northern parts, as to become objects of chase and commerce. The famous *Osther* the *Norwegian*, a native of *Helgeland* in the diocese of *Drontheim*, incited by a most laudable curiosity and thirst of discovery, sailed to the north of his country, doubled the *North Cape*, and in three days from his departure arrived at the farthest place, frequented by the *Horse-whale* fishers. From thence he proceeded a voyage of three days more, and perhaps got into the White Sea. On his return he visited *England*, probably incited by the fame of King *Alfred's* abilities, and the great encouragement he gave to men of distinguished character in every profession. The traveller, as a proof of the authenticity of his relation, presented the *Saxon* monarch with some of the teeth of these animals, then a substitute of ivory, and valued at a high price. In his account of his voyage, he also added that their skins were used in the ships instead of rope†.

NOVA ZEMBLA,
AND ICY SEA.

They are found again on the coasts of *Nova Zembla*, and on the headlands which stretch most towards the north pole; and as far as the *Tschutki* point, and the isles off that promontory. They scarcely extend lower than the neighborhood of the country of the *Anadyr*, but are seen in great abundance about cape *Newnham*, on the coast of *America*. The natives of the islands off the *Tschutki Nofs* ornament themselves with pieces of the Walrus stuck through their lips or noses; for which reason they are called by their neighbors *Zoobaree*, or *large-teethed*‡. The natives about *Unalaska*, *Sandwich Sound*, and *Turn-again* river, observe the same fashion. I entertain doubts whether these animals are of the same species with those of the

* *Pontoppidan*, ii. 157.† *Hackluyt*, i. 5.‡ *Hist. Kamtschatka*, 47.

Gulph of St. *Laurence*. The tusks of those of the Frozen Sea are much longer, more slender, and have a twist and inward curvature.

They are gregarious, and sometimes have been found together in thousands; are very shy, and avoid the haunts of mankind. They usually are seen on the floating ice, preferring that for their residence, as their bodies require cooling, by reason of the heat which arises from their excessive fatness*.

They are monogamous; couple in *June*, and bring forth in the earliest spring †. They bring one ‡, or very rarely two young at a time; feed on sea-plants, fish, and shells, which they either dig out of the sand, or force from the rocks with their great teeth. They make use also of their teeth to ascend the islands of ice, by fastening them in the cracks, and by that means draw up their bodies.

They sleep both on the ice and in the water, and snore excessively loud §.

They are harmless, unless provoked; but when wounded, or attacked, grow very fierce, and are very vindictive. When surprised upon the ice, the females first provide for the safety of the young, by flinging it into the sea, and itself after it, carrying it to a secure distance, then returning with great rage to revenge the injury. They will sometimes attempt to fasten their teeth on the boats, with an intent to sink them, or rise in numbers under them to overset them; at the same time they shew all marks of rage, by roaring in a dreadful manner, and gnashing their teeth with great violence; if once thoroughly irritated, the whole herd will follow the boats till they lose sight of them. They are strongly attached to each other, and will make every effort in their power, even to death, to set at liberty their harpooned companions ||.

MANNERS.

* *Nov. Com. Petrop.* ii. 291.

† *Faun. Greenl.* 4.

‡ *Barentz*, 4.

§ *Bluntius*, 109.

|| The same, 110.

A wounded Walrus has been known to sink to the bottom, rise suddenly again, and bring up with it multitudes of others, who united in an attack on the boat from which the insult came *.

They sling the water out of their nostrils, as the Whale does out of its head. When chased hard, they commonly vomit, and sling up small stones. Their dung is like that of a Horse, and excessively fetid, especially where they are found in large companies.

USES.

The tongue, which is about the size of a Cow's, may be eaten if boiled fresh; but if kept, soon runs into oil. The teeth used to be applied to all the purposes of ivory; but the animals are now killed only for the sake of the oil. Seamen make rings of the bristles of the whiskers, which they wear as preservatives against the cramp. The *French* coach-makers have made traces for coaches of the skins, which are said to be strong and elastic †. The *Russians* formerly used the bone of the penis pulverised, as a remedy against the stone ‡. *Bartholinus* § recommends it, infused in ale, in fits of the strangury. The *Greenlanders* eat the flesh and lard, and use the last in their lamps. Of the skin they make straps. They split the tendons into thread; and use the teeth to head their darts, or to make pegs in their boats.

Their only enemies, besides mankind, are the Polar Bears, with whom they have dreadful conflicts. Their feuds probably arise from the occupancy of the same piece of ice. The Walrus is usually victorious, through the superior advantage of its vast teeth ||. The effects of the battle are very evident; for it is not often that the hunters find a beast with two entire tusks ¶.

* *Phipps's Voy.* 57. † *De Buffon.* ‡ *Worm. Mus.* 290.

§ As quoted in *Museum Regium Hafniæ, &c.* pars i. sect. iii. 9. || *Egede*, 83.

¶ *Crantz*, i. 126.

"The Walrus, or Sea Cow, as it is called by the *Americans*," says Lord *Shuldbam* *, "is a native of the *Magdalene* islands, St. *John's*, and *Anticosti*, in the gulph of St. *Laurence*. They resort, very early in the spring, to the former of these places, which seems by nature particularly adapted to the nature of the animals, abounding with *clams* (escallops) of a very large size; and the most convenient landing-places, called *Ecboueries*. Here they crawl up in great numbers, and remain sometimes for fourteen days together without food, when the weather is fair; but on the first appearance of rain, they retreat to the water with great precipitation. They are, when out of the water, very unwieldy, and move with great difficulty. They weigh from fifteen hundred to two thousand pounds, producing, according to their size, from one to two barrels of oil, which is boiled out of the fat between the skin and the flesh. Immediately on their arrival, the females calve, and engender again in two months after; so that they carry their young about nine months. They never have more than two at a time, and seldom more than one.

"The *Ecboueries* † are formed principally by nature, being a gradual slope of soft rock, with which the *Magdalene* islands abound, about eighty or a hundred yards wide at the water-side, and spreading so as to contain, near the summit, a very large number of these animals. Here they are suffered to come on shore, and amuse themselves for a considerable time, till they acquire a degree of boldness, being at their first landing so ex-

* *Phil. Transf.* lxxv. part i. 249.—The *French* call them *Vaches Marines*. *Charlevoix*, v. 216. That voyager says, that the *English* had once a fishery of these animals on the *Isle de Sable*, a small island south of *Cape Breton*; but it turned out to no advantage.

† This word is derived from *Ecbouer*, to land, or run on shore.

"ceedingly

“ceedingly timid as to make it impossible for any person to approach them.

“In a few weeks they assemble in great multitudes : formerly, when undisturbed by the *Americans*, to the amount of seven or eight thousand. The form of the *Echouerie* not allowing them to remain contiguous to the water, the foremost are insensibly pushed above the slope. When they are arrived at a convenient distance, the hunters, being provided with a spear sharp on one side, like a knife, with which they cut their throats, take advantage of a side wind, or a breeze blowing obliquely upon the shore, to prevent the animals from smelling them, because they have that sense in great perfection. Having landed, the hunters, with the assistance of good dogs, trained for that purpose, in the night-time endeavour to separate those which are most advanced from the others, driving them different ways. This they call *making a cut* ; it is generally looked upon to be a most dangerous process, it being impossible to drive them in any particular direction, and difficult to avoid them ; but as the Walruses, which are advanced above the slope of the *Echouerie*, are deprived by the darkness of the night from every direction to the water, they are left wandering about, and killed at leisure, those that are nearest the shore being the first victims. In this manner have been killed fifteen or sixteen hundred at a *cut*.

“The people then skin them, and take off a coat of fat which always surrounds them, and dissolve it into oil. The skin is cut into slices of two or three inches wide, and exported to *America* for carriage traces, and into *England* for glue. The teeth make an inferior sort of ivory, and is manufactured for that purpose ; but very soon turns yellow.”

HIST. QUAD. GENUS XLII.

SEAL.

Br. Zool. i. N° 71.—Hist. Quad. N° 375.—Smellie.
Kalfigiak, Faun. Greenl. N° 6.—LEV. MUS.

72. COMMON.

SEAL. With a flat head and nose: large black eyes: large whiskers: six cutting teeth in the upper jaw; four in the lower: two canine teeth in each jaw: no external ears: hair on all parts short and thick: five toes on each foot, furnished with strong sharp claws, and strongly webbed: tail short and flat.

Usual length of this species, from five to six feet. Their color differs; dusky, brinded, or spotted with white and yellow.

Inhabits all the *European* seas, even to the extreme north; and is found far within the *Arctic* circle, in both *European* and *Asiatic* seas. It is continued to those of *Kamtschatka* *.

These animals may be called the flocks of the *Greenlanders*, and many other of the *Arctic* people. I cannot describe the uses of them to the former more expressively than in the very words of *Mr. Crantz*, a gentleman very long resident in their chilly country.

“ Seals are more needful to them than Sheep are to us, though
 “ they furnish us with food and raiment; or than the cocoa-tree is
 “ to the *Indians*, although that presents them not only with meat
 “ to eat, and covering for their bodies, but also houses to dwell in,
 “ and boats to sail in, so that in case of necessity they could live
 “ solely from it. The Seals flesh (together with the Rein-deer,
 “ which is already grown pretty scarce) supplies the natives with

THEIR GREAT
 USE TO THE
 GREENLANDERS.

* *Steller, in Nov. Com. Petrop. ii. 290.*

“ their

" their most palatable and substantial food. Their fat furnishes
 " them with oil for lamp-light, chamber and kitchen fire; and
 " whoever sees their habitations, presently finds, that if they even
 " had a superfluity of wood, it would not do, they can use nothing
 " but train in them. They also mollify their dry food, mostly fish,
 " in the train; and finally, they barter it for all kinds of necessities
 " with the factor. They can sew better with fibres of the Seals
 " sinews than with thread or silk. Of the skins of the entrails they
 " make their windows, curtains for their tents, shirts, and part of
 " the bladders they use at their harpoons; and they make train
 " bottles of the maw. Formerly, for want of iron, they made all
 " manner of instruments and working-tools of their bones. Nei-
 " ther is the blood wasted, but boiled with other ingredients, and
 " eaten as soup. Of the skin of the Seal they stand in the greatest
 " need; for, supposing the skins of Rein-deer and birds would
 " furnish them with competent cloathing for their bodies, and co-
 " verings for their beds; and their flesh, together with fish, with
 " sufficient food; and provided they could dress their meat with
 " wood, and also new model their house-keeping, so as to have
 " light, and keep themselves warm with it too; yet without the
 " Seals skins they would not be in a capacity of acquiring these
 " same Rein-deer, fowls, fishes, and wood; because they must
 " cover over with Seal-skin both their large and small boats, in
 " which they travel and seek their provision. They must also cut
 " their thongs or straps out of them, make the bladders for their
 " harpoons, and cover their tents with them; without which they
 " could not subsist in summer.

" Therefore no man can pass for a right *Greenlander* who cannot
 " catch Seals. This is the ultimate end they aspire at, in all their
 " device and labor from their childhood up. It is the only art
 " (and in truth a difficult and dangerous one it is) to which they
 " are

" are trained from their infancy; by which they maintain themselves, make themselves agreeable to others, and become beneficial members of the community*.

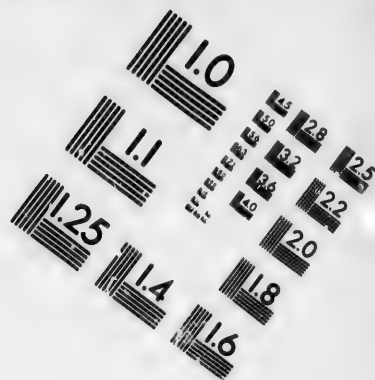
" The *Greenlanders* have three ways of catching Seals: either singly, with the bladder; or in company, by the *clapper-bunt*; or in the winter on the ice: whereto may be added the shooting them with a gun.

MANNER OF
TAKING.

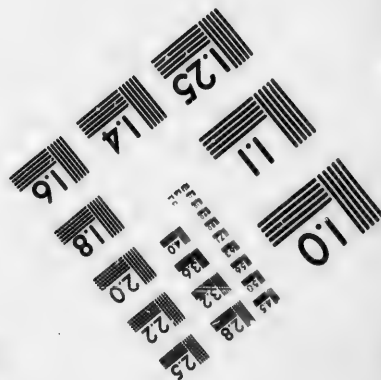
" The principal and most common way is the taking them with the bladder. When the *Greenlander* sets out equipped according to the 7th Section, and spies a Seal, he tries to surprise it unawares, with the wind and sun in his back, that he may not be heard or seen by it. He tries to conceal himself behind a wave, and makes hastily, but softly, up to it, till he comes within four, five, or six fathom of it; mean while he takes the utmost care that the harpoon, line, and bladder, lie in proper order. Then he takes hold of the oar with his left hand, and the harpoon with his right by the hand-board, and so away he throws it at the Seal, in such a manner that the whole dart flies from the hand-board and leaves that in his hand. If the harpoon hits the mark, and buries itself deeper than the barbs, it will directly disengage itself from the bone-joint, and that from the shaft; and also unwind the string from its lodge on the *kajak*. The moment the Seal is pierced, the *Greenlander* must throw the bladder, tied to the end of the string, into the water, on the same side as the Seal runs and dives; for that he does instantly, like a dart. Then the *Greenlander* goes and takes up the shaft swimming on the water, and lays it in its place. The Seal often drags the bladder with it under water, though 'tis a considerable impediment, on account of its great bigness; but it so wearies itself out with it,

* *Hist. Greenl.* i. 130.





A resolution test chart featuring several groups of horizontal and vertical lines of varying thicknesses. Each group is accompanied by a numerical value indicating the resolution. The values are: 1.0, 1.1, 1.25, 1.4, 1.6, 1.8, 2.0, 2.2, 2.5, 2.8, 3.2, 3.6, 4.0, 4.5, 5.0, 5.6, 6.3, 7.1, 8.0, 9.0, 10.0, 11.2, 12.5, 14.0, 16.0, 18.0, 20.0, 22.5, 25.0, 28.0, 32.0, 36.0, 40.0, 45.0, 50.0, 56.0, 63.0, 71.0, 80.0, 90.0, 100.0, 112.0, 125.0, 140.0, 160.0, 180.0, 200.0, 225.0, 250.0, 280.0, 320.0, 360.0, 400.0, 450.0, 500.0, 560.0, 630.0, 710.0, 800.0, 900.0, 1000.0, 1120.0, 1250.0, 1400.0, 1600.0, 1800.0, 2000.0, 2250.0, 2500.0, 2800.0, 3200.0, 3600.0, 4000.0, 4500.0, 5000.0, 5600.0, 6300.0, 7100.0, 8000.0, 9000.0, 10000.0.



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" that it must come up again in about a quarter of an hour to take
 " breath. The *Greenlander* hastens to the spot where he sees the
 " bladder rise up, and smites the Seal, as soon as it appears, with
 " the great lance described in the 6th Section *. This lance al-
 " ways comes out of its body again; but he throws it at the crea-
 " ture afresh every time it comes up, till 'tis quite spent. Then
 " he runs the little lance into it, and kills it outright, but stops up
 " the wound directly to preserve the blood; and lastly, he blows
 " it up, like a bladder, betwixt skin and flesh, to put it into a
 " better capacity of swimming after him; for which purpose he
 " fastens it to the left-side of his *kajak*, or boat †.

" In this exercise the *Greenlander* is exposed to the most and
 " greatest danger of his life; which is probably the reason that they
 " call this hunt, or fishery, *kamavock*, i. e. the Extinction, viz. of
 " life. For if the line should entangle itself, as it easily may, in its
 " sudden and violent motion; or if it should catch hold of the
 " *kajak*, or should wind itself round the oar, or the hand, or even
 " the neck, as it sometimes does in windy weather; or if the Seal
 " should turn suddenly to the other side of the boat; it cannot be
 " otherwise than that the *kajak* must be overturned by the string,
 " and drawn down under water. On such desperate occasions the
 " poor *Greenlander* stands in need of all the arts described in the
 " former Section, to disentangle himself from the string, and to
 " raise himself up from under the water several times successively;
 " for he will continually be overturning till he has quite disengaged
 " himself from the line. Nay, when he imagines himself to be
 " out of all danger, and comes too near the dying Seal, it may still
 " bite him in the face or hand; and a female Seal that has young,
 " instead of flying the field, will sometimes fly at the *Greenlander* in

* See the Sections referred to, and tab. v.

† See vol. i. 150. tab. viii.

“ the most vehement rage, and do him a mischief, or bite a hole in his *kajak* that he must sink.

“ In this way, singly, they can kill none but the careless stupid Seal, called *Attarsoak* *. Several in company must pursue the cautious *Kassigiak* † by the *clapper-bunt*. In the same manner they also surround and kill the *Attarsoit* ‡ in great numbers at certain seasons of the year; for in autumn they retire into the creeks or inlets in stormy weather, as in the *Nepisjet* sound in *Ball's* river, between the main land and the island *Kangek*, which is full two leagues long, but very narrow. There the *Greenlanders* cut off their retreat, and frighten them under water by shouting, clapping, and throwing stones; but, as they must come up again continually to draw breath, then they persecute them again till they are tired, and at last are obliged to stay so long above water, that they surround them, and kill them with the fourth kind of dart, described in the 6th Section. During this hunt we have a fine opportunity to see the agility of the *Greenlanders*, or, if I may call it so, their husar-like manœuvres. When the Seal rises out of the water, they all fly upon it, as if they had wings, with a desperate noise; the poor creature is forced to dive again directly, and the moment he does, they disappear again as fast as they came, and every one gives heed to his post, to see where it will start up again; which is an uncertain thing, and is commonly three quarters of a mile from the former spot. If a Seal has a good broad water, three or four leagues each way, it can keep the sportsmen in play for a couple of hours, before 'tis so spent that they can surround and kill it. If the Seal, in its fright, betakes itself to the land for a retreat, 'tis welcomed with sticks and stones by the women and children,

* See N° 77. of this work.
of N° 77.

† Ditto, N° 72.

‡ Ditto, a variety

COMMON SEAL.

" and presently pierced by the men in the rear. This is a very lively and a very profitable diversion for the *Greenlanders*, for many times one man will have eight or ten Seals for his share.

" The third method of killing Seals upon the ice, is mostly practised in *Disko*, where the bays are frozen over in the winter. There are several ways of proceeding. The Seals themselves make sometimes holes in the ice, where they come and draw breath; near such a hole a *Greenlander* seats himself on a stool, putting his feet on a lower one to keep them from the cold. Now when the Seal comes and puts its nose to the hole, he pierces it instantly with his harpoon; then breaks the hole larger, and draws it out and kills it quite. Or a *Greenlander* lays himself upon his belly, on a kind of a sledge, near other holes, where the Seals come out upon the ice to bask themselves in the sun. Near this great hole they make a little one, and another *Greenlander* puts a harpoon into it with a very long shaft or pole. He that lies upon the ice looks into the great hole, till he sees a Seal coming under the harpoon; then he gives the other the signal, who runs the Seal through with all his might.

" If the *Greenlander* sees a Seal lying near its hole upon the ice, he slides along upon his belly towards it, wags his head, and grunts like a Seal; and the poor Seal, thinking 'tis one of its innocent companions, lets him come near enough to pierce it with his long dart.

" When the current wears a great hole in the ice in the spring, the *Greenlanders* plant themselves all round it, till the Seals come in droves to the brim to fetch breath, and then they kill them with their harpoons. Many also are killed on the ice while they lie sleeping and snoring in the sun*."

* PP. 153, 4, 5, 6, 7.

Nature has been so niggardly in providing variety of provision for the *Greenlanders*, that they are necessitated to have recourse to such which is offered to them with a liberal hand. The *Kamtsebatkan* nations, which enjoy several animals, as well as a great and abundant choice of fish, are so enamoured with the taste of the fat of Seals, that they can make no feast without making it one of the dishes. Of that both *Russians* and *Kamtsebatkans* make their candles. The latter eat the flesh boiled, or else dried in the sun. If they have a great quantity, they preserve it in the following manner:

USES IN KAMT-
SCHATEKA.

They dig a pit of a requisite depth, and pave it with stones; then fill it with wood, and set it on fire so as to heat the pit to the warmth of a stove. They then collect all the cinders into a heap. They strew the bottom with the green wood of alder, on which they place separately the flesh and the fat, and put between every layer branches of the same tree; when the pit is filled they cover it with sods, so that the vapour cannot escape. After some hours they take out both fat and flesh, and keep it for winter's provisions, and they may be preserved a whole year without spoiling.

The *Kamtsebatkans* have a most singular ceremony. After they take the flesh from the heads of the Seals, they bring a vessel in form of a canoe, and sling into it all the skulls, crowned with certain herbs, and place them on the ground. A certain person enters the habitation with a sack filled with *Tonchitcha*, sweet herbs, and a little of the bark of willow. Two of the natives then roll a great stone towards the door, and cover it with pebbles; two others take the sweet herbs and dispose them, tied in little packets. The great stone is to signify the sea-shore, the pebbles the waves, and the packets Seals. They then bring three dishes of a hash, called *Tolkoucha*; of this they make little balls, in the middle of which they stick the packets of herbs: of the willow-bark they make a little canoe,

SUPERSTITIOUS
CUSTOM.

COMMON SEAL.

canoe, and fill it with *Tolkoucha*, and cover it with the sack. After some time, the two *Kamtschatskans* who had put the mimic Seals into the *Tolkoucha*, take the balls, and a vessel resembling a canoe, and draw it along the sand, as if it was on the sea, to convince the real Seals how agreeable it would be to them to come among the *Kamtschatskans*, who have a sea in their very *jurts*, or dwellings. And this they imagine will induce the Seals to suffer themselves to be taken in great numbers. Various other ceremonies, equally ridiculous, are practised; in one of which they *invoke the winds, which drive the Seals on their shores, to be propitious* *.

Besides the uses which are made of the flesh and fat of Seals, the skins of the largest are cut into soles for shoes. The women make their summer boots of the undressed skins, and wear them with the hair outmost. In a country which abounds so greatly in furs, very little more use is made of the skins of Seals in the article of dress than what has been mentioned †. But the *Koriaks*, the *Oloutores*, and *Tchutschi*, form with the skins canoes and vessels of different sizes, some large enough to carry thirty people.

Seals swarm on all the coasts of *Kamtschatka*, and will go up the rivers eighty *versets* in pursuit of fish. They couple on the ice in *April*, and sometimes on the rocks, and even in the sea in calm weather. The *Tungusi* give the milk of these animals to their children instead of physic.

CAPTURE.

The Seals in this country are killed by harpooning, by shooting, by watching the holes in the ice and knocking them on the head as they rise; or by placing two or three strong nets across one of the rivers which these animals frequent: fifty or more people assemble in canoes on each side of the nets, while others row up and down, and with great cries frighten the Seals into them. As soon as any

* *Dejer. Kamtschatka*, 425. † The same, 41, 42, 424.

are entangled, the people kill them with pikes or clubs, and drag them on shore, and divide them equally among the hunters; sometimes a hundred are taken at a time in this manner.

The navigators observed abundance of Seals about *Bering's* island, but that they decreased in numbers as they advanced towards the straits; for where the Walruses abounded, the Seals grew more and more scarce.

I did not observe any Seal-skin garments among those brought over by the navigators, such as one might have expected among the *Esquimaux* of the high latitudes they visited, and which are so much in use with those of *Hudson's Bay* and *Labrador*. That species of dress doubtless was worn in the earliest times. These people related their historians; but we are assured that the *Massagete** clothed themselves in the skins of Seals. They, according to *D'arville*, inhabited the country to the east of the *Caspian* sea, and the lake *Aral*; both of which waters abound with Seals.

MASSAGETÆ
CLOATHED IN
SEAL-SKINS.

Seals are now become a great article of commerce. The oil from the vast Whales is no longer equal to the demand for supplying the magnificent profusion of lamps in and round our capital. The chase of these animals is redoubled for that purpose; and the skins, properly tanned, are in considerable use in the manufactory of boots and shoes.

Five varieties of Seals are found in the *Baltic*. It is made a doubt whether they are not even distinct species.

The first is the Grey Seal, *Grå Siäl*, which when just born is wholly yellow: but that color soon grows obscure, and the skin becomes varied with spots or waved lines. This variety is the large of those which inhabit the *Swedish* seas.

The second is the *Hautskäl*. This, when just dropped, is more

* *Strabo*, lib. xi. 781.

white,

white, and never changes, unless to a tinge of pearl color, when it has ceased growing. It never attains the size of the former, lives separate from it, and is more timid.

These two varieties live on the high seas, and feed on herrings, *meduse*, and blennies. During winter they retire under the ice, through which they form holes by blowing on it, let the thickness be ever so great. In summer they mount on the sand-banks to sleep.

The Seal called the *Wikare gris*, and *Wikare noir*, are two varieties, which sleep on shore. The two preceding sometimes sleep in the sea, keeping their heads above water; they sleep so sound that the hunters can reach and harpoon them in that situation. The *Wikare* feeds chiefly on the *gasterosteus aculeatus*, LIN. three-spined stickleback, *Br. Zool.* III. No. 129. and becomes so fat, that when killed it cannot sink to the bottom. The young of the Black *Wikare* are constantly black; those of the Grey *Wikare* always grey.

Fifthly. The *Morunge* is always striped (*tigré*). This species is of late years so diminished, that for ten years past there has not been seen one in all the *Swedish archipelago*.

If these five are varieties, they are certainly varieties which live always separated, and never mingle with one another.

The chase of the Seals in the gulph of *Bothnia*, is as remarkable as that of the *Greenlanders*. In the spring, when the rivers of *Lapland* force with their stream, into the sea, vast masses of ice, the Grey Seals and *Hautskåls* retire upon them. The hunters never neglect the opportunity of taking them: they find out these floating mountains, which, according to Mr. *Hjarne*, are twelve or fourteen fathoms in thickness below water, and of a great extent. The hunters lay in provisions for six weeks, and a hearth to dress their meat on. They then moor their boat to one of these mountainous
pieces

pieces of ice, the hollows of which are filled with Seals. They cloath themselves in white, to render themselves less suspected by those animals. They also whiten their boats with lime; and sleep in them during night, and thus pass ten or twelve days among the ice, till they discover the Seals. When they hear a certain crackling, they consider it as a sign that the piece of ice is about to fall to pieces; they guard against the consequences, and seek another; and so continue rowing from one piece of ice to another, in search of the Seals, till they have exhausted every object of the chase.

Hist. Quad. N° 382.

Phoca Barbata, Faun. Greenl. N° 9.—Urkfuk. Greenl.

Lakktak, Hist. Kamtschatka, 420.—Lév. Mus.

73. GREAT.

S E A L. With long pellucid white whiskers with curled points: back arched: black hairs, very deciduous, and thinly dispersed over a thick skin, which in summer is almost naked: teeth like the common Seal: fore feet like the human hand; middle toe the longest; thumb short: length more than twelve feet.

The *Greenlanders* cut out of the skin of this species thongs and lines, a finger thick, for the Seal-fishery. Its flesh is white as veal, and esteemed the most delicate of any: has plenty of lard, but does not yield much oil. The skins of the young are sometimes used to lie on.

It inhabits the high sea about *Greenland*; is a timid species, and usually rests on the floating ice, and very seldom the fixed. Breeds in the earliest spring, or about the month of *March*, and brings forth a single young on the ice, usually among the islands; for at that

Vol. I.

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season

season it approaches a little nearer to the land. The great old ones swim very slowly.

In the seas of the north of *Scotland* is found a Seal twelve feet long. A gentleman of my acquaintance shot one of that size on the coast of *Sutherland*; but made no particular remarks on it. A young one, seven feet and half long, was shewn in *London* some years ago, which had not arrived at maturity enough even to have scarcely any teeth*: yet the common Seals have them complete before they attain the size of six feet, their utmost growth.

A species larger than an Ox, found in the *Kamtschatkan* seas from 56 to 64 north latitude, called by the natives *Lachtak* †. They weighed eight hundred pounds: were eaten by *Bering's* crew; but their flesh was found to be very loathsome ‡. The cubs are quite black.

STELLER has left behind him accounts of other Seals found in those wild seas; but his descriptions are so imperfect as to render it impossible to ascertain the species. He speaks in his MSS. of a middle-sized kind, universally and most elegantly spotted; another, black with brown spots, and the belly of a yellowish white, and as large as a yearling Ox; a third species, black, and with a particular formation of the hinder legs; and a fourth, of a yellowish color, with a great circle on it of the color of cherries §.

* *Ph. Transf. Abr.* ix. 74. tab. v. xlvii. 120.

† *Nov. Com. Petrop.* ii. 290.

‡ *Muller's Voy.* 60.

§ *Dr. Pallas, and Descr. Kamtschatka*, 420.

Hist. Zool. N° 383.

Phoca Fortida, Famn. Grænl. N° 8. — Neitfeck Grænl. Crantz, i.

94. ROUGH.

SEAL. With a short nose, and short round head: teeth like the common Seal: body almost of an elliptical form, covered with lard almost to the hind feet: hairs closely set together, soft, long, and somewhat erect, with curled wool intermixed: color dusky, streaked with white; sometimes varies to white, with a dusky dorsal line.

Does not exceed four feet in length.

Never frequents the high seas, but keeps on the fixed ice in the remote bays near the frozen land; and when old never forsakes its haunts. Couples in *June*; brings forth in *January*, on the fixed ice, which is its proper element. In that it has a hole for the benefit of fishing; near that it remains usually solitary, rarely in pairs. Is very incautious, and often sleeps on the surface of the water, yielding itself a prey to the Eagle. Feeds on small fish, shrimps, and the like. The uses of the skin, tendons, and lard, the same with those of other Seals. The flesh is red, and foetid, especially that of the males, which is nauseated by even the *Greenlanders*.

The Seal-hunters in *Newfoundland* have a large kind, which they call the *Square Flipper*, and say weighs five hundred pounds. Its coat is like that of a Water-dog; so that it seems by the length of hair to be allied to this; but the vast difference in size forbids us from pronouncing it to be the same species.

75. LEPORINE.

*Hist. Quad. N° 381.**Phoca Leporina, Lapechin, Ad. Acad. Petrop. pars. I. 264. tab. viii. ix.—**Hist. Quad. N° 381.*

SEAL. With hair of an uniform dirty white color, with a tinge of yellow, but never spotted; hairs erect, and interwoven; soft as that of a Hare, especially the young: head long: upper lip swelling and thick: whiskers very strong and thick, ranged in fifteen rows, covering the whole front of the lip, so as to make it appear bearded: eyes blue, pupil black: teeth strong; four cutting teeth above, the same below*: fore feet short, and ending abrupt: the membranes of the hind feet even, and not waved: tail short and thick; its length four inches two lines.

SIZE.

Length of this species, from nose to tip of the tail, is six feet six; its greatest circumference five feet two. The cubs are milk white.

This kind inhabits the *White Sea* during summer, and ascends and descends the mouths of rivers † with the tide in quest of prey. It is also found on the coasts of *Iceland*, and within the Polar circle from *Spitzbergen* to *Tchutki Nofs*, and from thence southward about *Kamtschatka*.

Like the others, it is killed for its fat and skin. The last is cut into pieces, and used for straps and reins. The skins of the young, which are remarkably white, are dyed with black, and used to face caps, in imitation of Beavers skins; but the hairs are much stiffer, and do not soon drop off.

* *Mr. Lapechin* compares the number of the teeth to that of another kind (our *Harp Seal*) which, he says, has only four teeth in the lower jaw.

† The same.

Hist. Quad. N° 384.*Phoca Leonina, Faun. Greenl.* N° 5.

76. HOODED.

SEAL. With four cutting teeth above, four below: fore feet like the human; the thumb long: the membranes on the hind feet extend beyond the claws: on the forehead of the male is a thick folded skin, ridged half the way up, which it can inflate and draw down like a cap, to defend its eyes against storms, waves, stones, and sand. The females and young have only the rudiment of this guard. It has two species of hair; the longest white, the shortest thick, black, and woolly, which gives it a beautiful grey color.

It grows to the length of eight feet. The *Greenlanders* call it *Neitsek-soak**, or the Great *Neitsek*. It inhabits only the southern parts of their country, where it inhabits the high seas; but in *April*, *May*, and *June*, comes nearer to the land. Is polygamous; copulates with its body erect. Brings forth in *April* one young upon the ice. Keeps much on the great fragments, where it sleeps in an unguarded way. Bites hard: barks, and whines: grows very fierce on being wounded; but will weep on being surprized by the hunter. Fight among themselves, and inflict deep wounds. Feed on all kinds of greater fish. The skins of the young form the most elegant dresses for the women. The men cover their great boats with those of the old; they also cover their houses with them, and when they grow old convert them into sacks. They use the teeth to head hunting-spears. Of the gullet and intestines they make the sea-dresses. The stomach is made into a fishing-buoy.

* *Crantz*, i. 25.

It

It is also found in *Newfoundland*. Our Seal-hunters name it the *Hooded Seal*, and pretend they cannot kill it till they remove that integument. The *Germans* call it *Klap-Mutze*, from its covering its face as if with a cap.

The most dreaded enemy which this species has in *Greenland* is the *Phyfeier Microps*; on the very sight of which it takes to the ice, and quietly expects its fate*. The *Greenlanders* therefore detest this species of Whale, not only on account of the havoc it makes, among the Seals, but because it frightens them away from the bays†.

It is entirely different from the *LEONINE SEAL*, or from that of the South-sea, called the *BOTTLE-NOSE*.

77. HARP.

Hist. Quad. N° 385.

Phoca Oceanica, *Krylatca Russi*, *Lepchin*, *AB. Acad. Petrop.* pars. i. 259. tab. vi. vii.

Phoca Greenlandica, *Faun. Greenl.* N° 7.—*Atak Greenl.* *Atarfoak*, *Crantz*, i. 124.

SEAL. With a round head: high forehead: nose short: large black eyes: whiskers disposed in ten rows of hairs: four cutting teeth in the upper jaw, the two middlemost the longest; four also in the lower, less sharp than the others: two canine teeth in each jaw: six grinders in each jaw, each three-pointed: hairs short: skin thick and strong.

Head, nose, and chin, of a deep chestnut color, nearly black; rest of the body of a dirty white, or light grey: on the top of the shoulders is a large mark of the same color; with the head bifur-

* *Faun. Greenl.* p. 9.

† The same, p. 45.

cated,

eated, each fork extending downwards along the sides half way the length of the body. This mark is always constant; but there are besides a few irregular spots incidental to the old ones.

The female has only two, retractile, teats; and brings only one young at a time. The cub, the first year, is of a bright ash-color, whitish beneath, and marked in all parts with multitudes of small black spots, at which period they are called by the *Russians* White Seals. In the next year they begin to be spotted; from that period the females continue unchanged in color. The males at full age, which Mr. *Crantz* says is their fifth year, attain their distinguishing spot, and are called by the *Greenlanders* *Attarsoak* *; by the *Russians*, *Krylatka*, or winged.

This inhabits the same countries with the *Rough* and *Leporine Seal*; but loves the coldest parts of the coast. Continues on the loose ice of *Nova Zembla* the whole year; and is seen only in the winter in the *White Sea*, on the floating ice carried from the northern seas. It brings forth its young about the end of *April*, and after suckling it a sufficient time departs with the first ice into the *Frozen Ocean*. The young remains behind for some time, then follows its parent with the ice which is loosed from the shore †.

It abounds in *Greenland* and about *Spitzbergen*, especially in the bottoms of the deep bays. Migrates in *Greenland* twice in the year: in *March*, and returns in *May*; in *June*, and returns in *September*. Couples in *July*, and brings forth towards the end of *March* or beginning of *April*: has one young, rarely two, which it suckles on fragments of ice far from land. It never ascends the fixed ice; but lives and sleeps on the floating islands in great herds. Swims in great numbers, having one for a leader, which seems to watch for the security of the whole. Eats its prey with its head above

* *Crantz*, i. 124.

† *Ad. Acad. Petrop.* pars 263.

HARP SEAL.

water. Swims in various ways; on its belly, back, and side, and often whirls about as if in frolick. Frequently sleeps on the surface of the water. Is very incautious. Has great dread of the *Physeter Microps*, which forces it towards the shore. It is often surrounded by troops of hunters, who compel it even to land, where it is easily killed.

It is found also about *Kamtschaska*, being the third species mentioned by *Steller*.

SIZE.

It grows to the length of nine feet. The measurements of one described by Mr. *Lepechin* are as follow:—The length, from the nose to the tip of the tail, was six feet: the length of the tail five inches three lines: the girth of the thickest part of the body four feet eight.

USES.

The skin is used to cover trunks; that of the young, taken in the isle of *Solovki*, on the west side of the *White Sea*, is made into boots, and is excellent for keeping out water. The *Greenlanders*, in dressing the skins, curry off the hair, and leave some fat on the inside to render them thicker. With these they cover their boats, and with the undressed skins their tents; and, when they can get no other, make use of them for cloathing.

The oil extracted from the blubber of this Seal is far the most valuable, being sweet, and so free from greaves as to yield a greater quantity than any other species. The flesh is black.

The *Newfoundland* Seal-hunters call it the *Harp*, or *Heart Seal*, and name the marks on the sides the saddle. They speak too of a brown sort, which they call *Bedlemer*, and believe to be the young of the former.

RUBBON AND URSINE SEAL.

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Hist. Quad. N° 380. fig. at p. 513.

78. RUBBON.

SEAL. With very short bristly hair, of an uniform glossy color, almost black: the whole back and sides comprehended within a narrow regular stripe of pale yellow.

It is to Dr. *Pallas* I owe the knowledge of this species. He received only part of the skin, which seemed to have been the back and sides. The length was four feet, the breadth two feet three; so it must have belonged to a large species. It was taken off the *Kuril* islands.

Hist. Quad. N° 387.

Kot *Ruffis* Gentilibus ad Sinum *Penchinicum*, *Tarlatshaga*, *Nov. Com. Petrop.* ii. 331. tab. xv.

Sea Wolf*, *Pernety*, *Engl. Tr.* 187. tab. xvi.—*Ulloa's Voy.* i. 226.

Chat Marin, *Hist. Kamtschatka*, 433.

79. URSINE.

SEAL. With a high forehead: nose projecting like that of a dog: black irides: smaragdine pupil: whiskers composed of triangular hairs, thinly scattered: nostrils oval, divided by a *septum*: lips thick; their inside red, and ferrated.

In the upper jaw four bifurcated cutting teeth; on each side of these a very sharp canine tooth bending inwards; beyond these another, which, in battle, the animal strikes with, as Boars do with

TEETH.

* The *French* generic name for the Seal is *Loup Marin*, and the *Spanish*, *Lobo Marino*.

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their tusks. Instead of grinders, in each upper jaw are six sharp teeth resembling canine, and very slightly exerted. In the lower jaw four cutting teeth, and canine like those in the upper; and on each side ten others in the place of grinders. When the mouth is closed all the teeth lock into each other.

TONGUE, EARS.

The tongue rough and bifid: the ears short, small, and sharp-pointed, hairy on the outside, smooth and polished within.

FORE LEGS.

Fore legs two feet long, not immersed in the body, like those of other Seals, but resemble those of common quadrupeds. The feet are furnished with five toes, with the rudiments of nails; but these are so entirely covered with a naked skin, as to be as much concealed as a hand is with a mitten. The animal stands on these legs with the utmost firmness; yet the feet seem but a shapeless mass.

HIND LEGS.

The hind legs are twenty-two inches long, and situated like those of Seals; but are capable of being brought forward, so that the animal makes use of them to scratch its head: on each are five toes, connected by a large web; and are a foot broad. The tail is only two inches long.

TAIL.

BODY.

The body is of a conoid shape. The length of a large one is about eight feet; the circumference near the shoulders is five feet, near the tail twenty inches. The weight eight hundred pounds.

FEMALE.

The female is far inferior in size to the male: it has two teats, placed far behind.

COLOR.

The whole animal is covered with long and rough hair, of a blackish color; that of the old is tipped with grey; and on the neck of the males is a little longer and erect: beneath the hair is a soft fur of a bay color. The females are cinereous. The skin is thick and strong.

These

These animals are found in amazing multitudes on the islands between *Kamtschatka* and *America* *; but are scarcely known to land on the *Asiatic* shore: nor are they ever taken except in the three *Kurilian* islands, and from thence in the *Bobrowois More*, or *Beaver Sea*, as far as the *Kronoski* headland, off the river *Kamtschatka*, which comprehends only from 50 to 56 north latitude. It is observable that they never double the southern cape of the peninsula, or are found on the western side in the *Penschinska* sea: but their great resort has been observed to be to *Bering's* islands. They are as regularly migratory as birds of passage. They first appear off the three *Kurili* islands and *Kamtschatka* in the earliest spring. They arrive excessively fat; and there is not one female which does not come pregnant. Such which are then taken are opened, the young taken out and skinned. They are found in *Bering's* island only on the western shore, being the part opposite to *Asia*, where they first appear on their migration from the south. They continue on shore three months, during which time the females bring forth. Excepting their employ of suckling their young, they pass their time in total inactivity. The males sink into the most profound indolence, and deep sleep; nor are they ever roused, except by some great provocation, arising from an invasion of their place, or a jealousy of their females. During the whole time they neither eat nor drink. *Steller* dissected numbers, without finding the least appearance of food in their stomachs.

They live in families. Every male is surrounded by a seraglio of from eight to fifty mistresses; these he guards with the jealousy of an eastern monarch. Each family keeps separate from the others,

PLACE.

MIGRATORY.

LONG SLEEP AND
FASTING.

LIVE IN FAMIL-
LIES.

* They say that the *Sea-Cat*, or *Siwutcha*, is found in those islands; but *Siwutcha* is the name given by the *Kamtschatkans* and *Kurilians* to the *Leonine Seal* only. *Northern Archipelago*, &c. by *Von Stæhlen*. Printed for *Heydinger*, 1774, p. 34.

notwithstanding they lie by thousands on the shore. Every family, with the unmarried and the young, amount to about a hundred and twenty. They also swim in tribes when they take to the sea.

AFFECTION
TOWARDS THEIR
YOUNG.

The males shew great affection towards their young, and equal tyranny towards the females. The former are fierce in the protection of their offspring; and should any one attempt to take their cub, will stand on the defensive, while the female carries it away in her mouth. Should she happen to drop it, the male instantly quits its enemy, falls on her, and beats her against the stones till he leaves her for dead. As soon as she recovers, she crawls to his feet in the most suppliant manner, and washes them with her tears; he at the same time brutally insults her misery, stalking about in the most insolent manner. But if the young is entirely carried off, he melts into the greatest affliction, likewise sheds tears, and shews every mark of deep sorrow. It is probable that as the female brings only one, or at most two cubs, he feels his misfortune the more sensibly.

CONFLICTS;

Those animals which are destitute of females, through age or impotence, or are deserted by them, withdraw themselves from society, and grow excessively splenetic, peevish, and quarrelsome; are very furious, and so attached to their antient stations, as to prefer death to the loss of them. They are enormously fat, and emit a most nauseous and rank smell. If they perceive another animal approach its seat, they are instantly roused from their indolence, snap at the encroacher, and give battle. During the fight they insensibly intrude on the station of their neighbor. This creates new offence; so that at length the civil discord spreads through the whole shore, attended with hideous growls, their note of war. They are very tenacious of life, and will live a fortnight after receiving such wounds as would soon destroy any other animal.

CAUSES OF THEM.

The particular causes of disputes among these irascible beasts are the

the following :—The first and greatest is, when an attempt is made to seduce any of their mistresses, or a young female of the family : a battle is the immediate consequence of the insult. The unhappy vanquished instantly loses his whole seraglio, who desert him for the victorious hero.

The invasion of the station of another, gives rise to fresh conflicts, and the third cause is the interfering in the disputes of others. The battles they wage are very tremendous ; the wounds they inflict very deep, like the cut of a sabre. At the conclusion of an engagement they fling themselves into the sea to wash off the blood.

Besides their notes of war, they have several others. When they lie on shore, and are diverting themselves, they low like a Cow. After victory they chirp like a Cricket. On a defeat, or after receiving a wound, mew like a Cat.

Common Seals, and Sea Otters, stand in great awe of these animals, and shun their haunts. They again are in equal awe of the Leonine Seals, and do not care to begin a quarrel in their fight, dreading the intervention of such formidable arbitrators ; who likewise possess the first place on the shore.

The great and old animals are in no fear of mankind, unless they are suddenly surprized by a loud shout, when they will hurry by thousands into the sea, swim about, and stare at the novelty of their disturbers.

When they come out of the water, they shake themselves, and smooth their hair with their hind feet : apply their lips to those of the females, as if they meant to kiss them : lie down and bask in the sun with their hind legs up, which they wag as a Dog does its tail. Sometimes they lie on their back, sometimes roll themselves up into a ball, and fall asleep. Their sleep is never so sound but they are awake by the least alarm ; for their sense of hearing, and also that of smelling, is most exquisite.

They

NOTES.

DREAD THE LEONINE SEAL.

FEAR NOT MANKIND.

COPULATION.

They copulate, *more humano*, in *July*, and bring forth in the *June* following; so they go with young eleven months. The cubs are as sportive as puppies; have mock fights, and tumble one another on the ground. The male parent looks on with a sort of complacency, parts them, licks and kisses them, and seems to take a greater affection to the victor than to the others.

SWIFT SWIMMERS.

They swim with amazing swiftness and strength, even at the rate of seven or eight miles an hour, and often on their back. They dive well, and continue a great while under water. If wounded in that element, they will seize on the boat, carry it with them with great impetuosity, and often will sink it.

When they wish to ascend the rocks, they fix their fore feet on them, arch their backs, and then draw themselves up.

CAPTURE.

The *Kamtshatkans* take them by harpooning, for they never land on their shore. To the harpoon is fastened a long line, by which they draw the animal to the boat after it is spent with fatigue; but in the chase, the hunters are very fearful of too near an approach, lest the animal should fasten on and sink their vessel.

USES.

The uses of them are not great. The flesh of the old males is rank and nauseous; that of the females is said to resemble lamb; of the young ones roasted, a sucking pig. The skins of the young, cut out of the bellies of the dams, are esteemed for cloathing, and are sold for about three shillings and four pence each; those of the old for only four shillings.

RE-MIGRATION.

Their re-migration is in the month of *September*, when they depart excessively lean, and take their young with them. On their return, they again pass near the same parts of *Kamtshatka* which they did in the spring. Their winter retreats are quite unknown; it is probable that they are the islands between the *Kurili* and *Japan*, of which we have some brief accounts, under the name of *Compagnie Land*, *States Land*, and *Jeso Gasima*, which were discovered by *Mar-*

tin

in *Uriel* in 1642*. It is certain that by his account the natives employ themselves in the capture of Seals†. Sailors do not give themselves the trouble of observing the nice distinction of specific marks, we are therefore at liberty to conjecture those which he saw to be our animals, especially as we can fix on no more convenient place for their winter quarters. They arrive along the shores of the *Kurili* islands, and part of those of *Kamtschatka*, from the south. They land and inhabit only the western side of *Bering's* isle, which faces *Kamtschatka*; and when they return in *September*, their route is due south, pointing towards the discoveries of *Uriel*. Had they migrated from the south-east as well as the south-west, every isle, and every side of every isle, would have been filled with them; nor should we have found (as we do) such a constant and local residence.

Before I quit this article I must observe, that there seems to be in the seas of *Jeso Gafimo* another species of Seal, perhaps our Little Seal, N° 386. *Hist. Quad.* The account indeed is but obscure, which I must give as related by *Charlevoix* in his compilations respecting that island. "The natives," says he, "make use of an oil to drink, drawn from a sort of fish, a small hairy creature with four feet." If this account is true, it serves to point out the farthest known residence of this genus, on this side of the northern hemisphere.

Finally, the *Ursine* Seals are found in the southern hemisphere, even from under the line, in the isle of *Gallipagos*‡, to *New Georgia*§,

URSINE SEAL
IN THE SOUTH-
ERN HEMI-
SPHERE.

* He sailed from the east side of *Japan* in the ship *Castricom*, visited the isle of *Jeso*, and discovered the islands which he called *States Land* and *Company Land*, the last not very remote from the most southern *Kurili* island. *Recueil de Voy. au Nord*, iv. 1.

† The same, 12.

‡ *Woodes Rogers's Voy.* 265.—He says that they are neither so numerous there, nor is their fur so fine as those on *Juan Fernandez*, which is said to be extremely soft and delicate.

§ *Cook's Voy.* ii. 213.

LEONINE SEAL.

in south latitude 54. 15. and west longitude 37. 15. In the intermediate parts, they are met with in *New Zeland* *, in the isle of *Juan Fernandez*, and its neighbor *Massa Fuera*, and probably along the coasts of *Chili* to *Terra del Fuego*, and *Staten Land*. In *Juan Fernandez*, *Staten Land*, and *New Georgia* †, they swarm; as they do at the northern extremity of this vast ocean. Those of the southern hemisphere have also their seasons of migration. *Alexander Selkirk*, who passed three lonely years on the isle of *Juan Fernandez*, remarks that they come ashore in *June*, and stay till *September* ‡. Captain *Cook* found them again, in their place of re-migration, in equal abundance, on *Staten Land* and *New Georgia*, in the months of *December* and *January* §; and *Don Pernety* || found them on the *Falkland* islands, in the month of *February*.

According to the *Greenlanders*, this species inhabits the southern parts of their country. They call it *Auvekajak*. That it is very fierce, and tears to pieces whatsoever it meets; that it lives on land as well as in water, swims most impetuously, and is dreaded by the hunters ¶.

80. LEONINE.

Hist. Quad. N° 389.

Bestia Marina, Kurillis, Kamtschadalis et Russis, Kurillico nomine Siwantschal dicta. Nov. Com. Petrop. ii. 360.

Lion Marin, Hist. Kamtschatka, 428.

SEAL. With a large head: nose turning up like that of a pug
Dog: eyes large; pupil smaragdine: the greater angle of each
as if stained with cinnabar color. In the upper jaw four small cutting
teeth; the exterior on each side remote, and at some distance

* *Cook*, i. 72. 86.—*Forster's Obs.* 189. † *Anson's Voy.* 122.—*Cook*, ii. 194. 213. ‡ *Selkirk's account in W. Rogers's Voy.* 136. § ii. 194. 213.

|| *His voyage, Eng. Tr.* 187.

¶ *Faun. Greenl.* p. 6.

from

from these are two large canine teeth : in the lower jaw four small cutting teeth, and the canine : the grinders small and obtuse ; four on each side above, and five below : ears conic and erect : feet exactly like those of the *Ursine* Seal.

Along the neck of the male is a mane of stiff curled hair ; and the whole neck is covered with long waved hairs, such as distinguish a Lion ; the rest of the animal clothed with short reddish hairs : those of the female are of the color of ochre ; the young of a much deeper. The old animals grow grey with age.

The weight of a large male beast is sixteen hundred pounds. Length of the males is sometimes fourteen, or even eighteen feet *. The females are very disproportionably lesser, not exceeding eight feet.

Inhabits the eastern coasts of *Kamtschatka*, from cape *Kronozki* as low as cape *Lapatka* and the *Kurili* islands, and even as far as *Matsmai*, which probably is the same with *Jeso Gafima*. Near *Matsmai* Captain *Spanberg* observed a certain island of a most picturesque form, bordered with rocks resembling buildings, and swarming with these animals, to which he gave the name of the *Palace of the Sea Lions* †. Like the *Ursine* Seals, they are not found on the western side of the peninsula. They abound, in the months of *June*, *July*, *August*, and *September*, on *Bering's* island, which they inhabit for the sake of quiet parturition and suckling their young. *Steller* also saw them in abundance in *July* on the coasts of *America*.

They do not migrate like the former ; but only change the place of residence, having winter and summer stations ‡. They live

* *Narborough*, 31.—*Penrose Falkland Isles*, 28.—*Pernetti, Voy. Malouines*, 240.—By his confounding the names of this and the Bottle-nose Seal, N° 288. *Hist. Quad.* he led me into a mistake about the length of this.

† *Descr. Kamtschatka*, 433.

‡ *Nov. Com. Petrop.* ii. 365.

LEONINE SEAL.

chiefly on rocky shores, or lofty rocks in the sea, which seem to have been torn away from the land by the violence of some earthquake*. These they climb, and by their dreadful roaring are of use in foggy weather to warn navigators to avoid destruction.

They copulate in the months of *August* and *September*; go ten months, and bring only one at a time. The parents shew them little affection, often tread them to death through carelessness, and will suffer them to be killed before them without concern or resentment. The cubs are not sportive, like other young animals, but are almost always asleep. Both male and female take them to sea to learn them to swim; when wearied, they will climb on the back of their dam; but the male often pushes them off, to habituate them to the exercise. The *Russians* were wont to fling the cubs into the water, and they always swam back to shore.

The males treat the females with great respect, and are very fond of their caresses. They are polygamous, but content themselves with fewer wives than the former, having only from two to four apiece.

FEAR MANKIND; The males have a terrible aspect, yet they take to flight on the first appearance of a human creature; and if they are disturbed from their sleep, seem seized with great horrors, sigh deeply in their attempts to go away, fall into vast confusion, tumble down, and tremble in such a manner as scarcely to be able to use their limbs. But if they are reduced to a strait, so as not possibly to effect an escape, they grow desperate, turn on their enemy with great fury and noise, and even put the most valiant to flight.

**UNLESS HABITU-
ATED.**

By use they lose their fear of men. *Steller* once lived for six days in a hovel amidst their chief quarters, and found them soon recon-

* *Müller's Voy.* 60.

LEONINE SEAL.

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cilled to the fight of him. They would observe what he was doing with great calmness, lie down opposite to him, and suffer him to seize on their cubs. He had an opportunity of seeing their conflicts about their females; and once saw a duel between two males, which lasted three days, and one of them received above a hundred wounds. The Urfine Seals never interfered, but got out of the way as fast as possible. They even suffered the cubs of the former to sport with them without offering them the least injury.

This species has many of the same actions with the former, in swimming, walking, lying, and scratching itself. The old bellow like Bulls; the young bleat like Sheep. *Steller* says, that from their notes he seemed like a rustic amidst his herds. The males had a strong smell, but were not near so fetid as the Urfine sort.

Their food is fish, the lesser Seals, Sea Otters, and other marine animals. During the months of *June* and *July* the old males almost entirely abstain from eating, indulge in indolence and sleep, and become excessively emaciated.

The voyagers made use of them to subsist on, and thought the flesh of the young very savoury. The feet turned into jelly on being dressed, and in their situation were esteemed great delicacies. The fat was not oily; that of the young resembled the suet of mutton, and was as delicious as marrow. The skin was useful for straps, shoes, and boots.

The *Kamtschatkans* esteem the chase of these animals a generous diversion, and hold the man in highest honor, in proportion to the number he has killed. Even these heroes are very cautious when they attack one of the animals on shore: they watch an opportunity when they find it asleep, approach it against the wind, strike their harpoon, fastened to a long thong, into its breast, while their

NOTES.

FOOD.

USE.

CHASE.

comrades fasten one end to a stake, and that done, he takes to his heels with the utmost precipitation. They effect his destruction at a distance, by shooting him with arrows, or flinging their lances into him; and when exhausted, they venture to come near enough to knock him on the head with clubs.

When they discover one on the lonely rocks in the sea, they shoot it with poisoned arrows: unable to endure the pain of the wound, heightened by the salt-water, which it plunges into on the first receiving it, it swims on shore in the greatest agony. If they find a good opportunity, they transfix it with their weapons; if not, they leave it to die of the poison, which it infallibly does in twenty-four hours, and in the most dreadful agony*.

They esteem it a great disgrace to leave any of their game behind: and this point of honor they often observe, even to their own destruction; for it happens that when they go in search of these animals to the isle of *Alait*, which lies some miles south-west of *Lapaika* promontory, they observe this principle so religiously, as to overload their boats so much, as to send them and their booty to the bottom; for they scorn to save themselves, at the expence of throwing overboard any part†.

This species has been discovered very low in the southern hemisphere; but, I believe, not on the western side. Sir *John Narborough*‡ met with them on an island off *Port Desire*, in lat. 47. 48. Sir *Richard Hawkins*§ found them on *Penguin* isle, within the second *Narrow* of the straits of *Magellan*. They abound in the *Falkland Islands*||; and were again discovered by Captain *Cook* on

* *Descr. Kamtschatka*, 377. † *Nov. Com. Petrop.* ii. 302. ‡ *Voy.* 31.

§ *Voy.* 75. || *Pernety's Voy.* 188. tab. xvi.

the *New Year's Islands*, off the west coast of *Staten Land* *. In those southern latitudes they bring forth their young in the middle of our winter, the season in which our late circumnavigators † visited those distant parts.

* *Cook*, ii. 194. 203.—The months in which these animals were observed by the navigators, were *January* and *February*; but by Sir *J. Narborough*, in the straits of *Magellan*, about the 4th of *March*, O. S.

† *Forster's Voy.* ii. 514.

MANATI.

HIST. QUAD. GENUS XLIII.

81. WHALE-
TAILED.*Hist. Quad. N° 390.**Morskaja Korowa, Russorum. Nov. Com. Petrop. ii. 294.**Vaches Marines, Descr. Kamtschatka, 446.*

MANATI. With a small oblong squarish head, hanging down: mouth small: lips doubled, forming an outward and inward lip: about the junction of the jaws a set of white tubular bristles, as thick as a pigeon's quill, which serve as strainers to permit the running out of the water, and to retain the food: the lips covered with strong bristles, which serve instead of teeth to crop the strong roots of marine plants: no teeth, but in each jaw a flat white oblong bone with an undulated surface, which being placed above and below, performs the use of grinders to comminute the food.

Nostrils placed at the end of the nose, and lined with bristles: no ears, only in their place a small orifice.

Eyes very small, not larger than those of a Sheep, hardly visible through the little round holes in the skin; the irides black; the pupil livid: tongue pointed and small.

The whole animal is of great deformity: the neck thick, and its union with the head scarcely discernible: the two feet, or rather fins, are fixed near the shoulders; are only twenty-six inches long; are destitute of toes, or nails, but terminate in a sort of hoof, concave beneath, lined with bristles, and fitted for digging in sand.

The outward skin is black, rugged, and knotty, like the bark of an aged oak: without any hair; an inch thick, and so hard as scarcely

WHALE-TAILED MANATI.

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scarcely to be cut with an ax ; and when cut, appears in the inside like ebony. From the nape to the tail it is marked with circular wrinkles rising into knots, and sharp points on the side. This skin covers the whole body like a crust, and is of singular use to the animal during winter, in protecting it against the ice, under which it often feeds, or against the sharp-pointed rocks, against which it is often dashed by the wintry storms. It is also an equal guard against the summer heats ; for this animal does not, like most other marine creatures, feed at the bottom, but with part of the body exposed, as well to the rays of the sun as to the piercing cold of the frost. In fact, this integument is so essential to its preservation, that *Steller* has observed several dead on the shore, which he believes were killed by the accidental privation of it. The color of this skin, when wet, is dusky, when dried, quite black.

The tail is horizontally flat ; black, and ending in a stiff fin, composed of laminæ like whale-bone, terminating with fibres near nine inches long. It is slightly forked ; but both ends are of equal lengths, like the tail of a Whale.

It has two teats placed exactly on the breast. The milk is thick and sweet, not unlike that of a Ewe. These animals copulate *more humano*, and in the season of courtship sport long in the sea ; the female feigning to shun the embraces of the male, who pursues her through all the mazes of her flight.

The body, from the shoulders to the navel, is very thick ; from thence to the tail grows gradually more slender. The belly is very large ; and, by reason of the quantity of entrails, very tumid.

These animals grow to the length of twenty-eight feet. The measurements of one somewhat lesser, as given by Mr. *Steller*, are as follow :

The length, from the nose to the end of the tail, twenty-four feet and a half : from the nose to the shoulders, or setting-on of the fins,

TAIL.

SIZE.

WHALE-TAILED MANATI.

fins, four feet four. The circumference of the head, above the nostrils, two feet seven; above the ears, four feet: at the nape of the neck, near seven feet: at the shoulders, twelve: about the belly, above twenty: near the tail, only four feet eight: the extent of the tail, from point to point, six feet and a half.

WEIGHT.

The weight of a large one is eight thousand pounds.

PLACE.

Inhabits the shores of *Bering's* and the other islands which intervene between the two continents. They never appear off *Kamt-schaka*, unless blown ashore by tempests, as they sometimes are about the bay of *Awatscha*. The natives style them *Kapustnik*, or cabbage-eaters, from their food. This genus has not been discovered in any other part of the northern hemisphere. That which inhabits the eastern side of *South America*, and some part of *Africa*, is of a different species. For the latter I can testify, from having seen one from *Senegal*. Its body was quite smooth; its tail swelled out in the middle, and sloped towards the end, which was rounded*. To support my other opinion, I can call in the faithful *Dampier*; who describes the body as perfectly smooth†: had it that striking integument which the species in question has, it could not have escaped his notice. Let me also add, that the size of those which that able seaman observed, did not exceed ten or twelve feet; nor the weight of the largest reach that of twelve hundred pounds‡.

I suspect that this species extends to *Mindanao*, for one kind is certainly found there§. It is met with much farther south; for I discover, in the collection of Sir JOSEPH BANKS, a sketch of one taken near *Diego Rodriguez*, vulgarly called *Diego Rais*, an isle to the east of *Mauritius*; and it may possibly have found its way through some northern inlet to the seas of *Greenland*; for Mr. Fa-

* A figure of this species is given in *De Buffon*, xii. tab. lvii. and in *Schreber*, ii. tab. lxxx.

† *Voy.* i. 33.

‡ *Ibid.*

§ *Dampier*, i. 321.

WHALE-TAILED MANATI.

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abricius once discovered in that country the head of one, half consumed, with teeth exactly agreeing with those of this species *.

These animals frequent the shallow and sandy parts of the shores, and near the mouths of the small rivers of the island of *Bering*, seemingly pleased with the sweet water. They go in herds: the old keep behind and drive their young before them: and some keep on their sides, by way of protection. On the rising of the tide they approach the shores, and are so tame as to suffer themselves to be stroked: if they are roughly treated, they move towards the sea: but soon forget the injury, and return.

They live in families near one another: each consists of a male and female, a half-grown young, and a new-born one. The families often unite, so as to form vast droves. They are monogamous. They bring forth a single young, but have no particular time of parturition; but chiefly, as *Steller* imagines, about *autumn*.

They are most innocent and harmless in their manners, and most strongly attached to one another. When one is hooked, the whole herd will attempt its rescue: some will strive to overset the boat, by going beneath it; others will fling themselves on the rope of the hook and press it down, in order to break it; and others again will make the utmost efforts to force the instrument out of its wounded companion.

Their conjugal affection is most exemplary: a male, after using all its endeavours to release its mate which had been struck, pursued it to the very edge of the water; no blows could force it away. As long as the deceased female continued in the water, he persisted in his attendance; and even for three days after she was drawn on shore, and even cut up and carried away, was observed to remain, as if in expectation of her return.

MANNERS.

* *Faun. Greenl.* p. 6.

WHALE-TAILED MANATI.

They are most voracious creatures, and feed with their head under water, quite inattentive of the boats, or any thing that passes about them; moving and swimming gently after one another, with much of their back above water. A species of louse harbours in the roughness of their coats, which the Gulls pick out, sitting on them as Crows do on Hogs and Sheep. Every now and then they lift their nose out of the water to take breath, and make a noise like the snorting of Horses. When the tide retires, they swim away along with it; but sometimes the young are left ashore till the return of the water: otherwise they never quit that element: so that in nature, as well as form, they approach the cetaceous animals, and are the link between Seals and them.

CAPTURE.

They were taken on *Bering's* isle by a great hook fastened to a long rope. Four or five people took it with them in a boat, and rowed amidst a herd. The strongest man took the instrument, struck it into the nearest animal; which done, thirty people on shore seized the rope, and with great difficulty drew it on shore. The poor creature makes the strongest resistance, assisted by its faithful companions. It will cling with its feet to the rocks till it leaves the skin behind; and often great fragments of the crusty integument fly off before it can be landed. It is an animal full of blood; so that it spouts in amazing quantities from the orifice of the wound.

They have no voice; only, when wounded, emit a deep sigh.

They have the senses of sight and hearing very imperfect; or at least neglect the use of them.

They are not migratory; for they were seen about *Bering's* island the whole of the sad ten months which Mr. *Steller* passed there after his shipwreck.

In the summer they were very fat; in the winter so lean that the ribs might be counted.

The

S E A A P E.

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The skin is used, by the inhabitants about the promontory *Tchuktchi*, to cover their boats. The fat, which covers the whole body like a thick blubber, was thought to be as good and sweet as *May-butter*: that of the young, like hogs-lard. The flesh of the old, when well boiled, resembled beef: that of the young, veal. The flesh will not refuse salt. The crew preserved several casks full, which was found of excellent service in their escape from their horrible confinement*.

USES.
THE FAT.

LEAN.

To this article must be added an imperfect description of a marine animal seen by Mr. *Steller* on the coast of *America*, which he calls a *Sea Ape*. The head appeared like that of a Dog, with sharp and upright ears, large eyes, and with both lips bearded: the body round and conoid; the thickest part near the head: the tail forked; the upper lobe the longest: the body covered with thick hair, grey on the back, reddish on the belly. It seemed destitute of feet.

SEA APE.

It was extremely wanton, and played a multitude of monkey-tricks. It sometimes swam on one side, sometimes on the other side of the ship, and gazed at it with great admiration. It made so near an approach to the vessel, as almost to be touched with a pole; but if any body moved, it instantly retired. It would often stand erect for a considerable space, with one-third of its body above water; then dart beneath the ship, and appear on the other side; and repeat the same thirty times together. It would frequently arise with a sea-plant, not unlike the Bottle-gourd, toss it up, and catch it in its mouth, playing with it numberless fantastic tricks†.

On animals of this species the fable of the *Sirens* might very well be founded.

* *Muller's Voy. 62.—Nov. Com. Petrop. ii. 329.*

† *Hist. Kamtschatka. 136.*

SEA
BELUGA.

I shall conclude this article with a recantation of what I say in the 357th page of my Synopsis, relating to the *Beluga*; which I now find was collected, by the author I cite, from the reports of *Cossacks*, and ignorant fishermen. The animal proves at last to be one of the cetaceous tribe, of the genus of *Dolphin*, and of a species called by the *Germans Wit-Fisch*, and by the *Russians Beluga**; both signifying White fish: but to this the last add *Morjkaia*, or of the sea, by way of distinguishing it from a species of Sturgeon so named. It is common in all the *Arctic* seas; and forms an article of commerce, being taken on account of its blubber. They are numerous in the gulph of St. *Lawrence*; and go with the tide as high as *Quebec*. There are fisheries for them, and the common *Porpessé*, in that river. A considerable quantity of oil is extracted; and of their skins is made a sort of Morocco leather, thin, yet strong enough to resist a musquet-ball †. They are frequent in the *Dwina* and the *Oby*; and go in small families from five to ten, and advance pretty far up the rivers in pursuit of fish. They are usually caught in nets; but are sometimes harpooned. They bring only one young at a time, which is dusky; but grow white as they advance in age; the change first commencing on the belly. They are apt to follow boats, as if they were tamed; and appear extremely beautiful, by reason of their resplendent whiteness ‡.

It being a species very little known, and never well engraven, I shall give a brief description, and adjoin an engraving taken from an excellent drawing communicated to me by Dr. *Pallas*.

DESCRIPTION.

The head is short: nose blunt: spiracle small, of the form of a crescent: eyes very minute: mouth small: in each side of each jaw are nine teeth, short, and rather blunt; those of the upper jaw are

* *Pallas, Itin.* iii. 84. tab. iv.—*Crantz Greenl.* i. 114.—*Purchas's Pilgrims*, iii. 549.
† *Charlevoix*, v. 217. ‡ *Faun. Greenl.* 51.

bent,

bent, and hollowed, fitted to receive the teeth of the lower jaw when the mouth is closed: pectoral fins nearly of an oval form: beneath the skin may be felt the bones of five fingers, which terminate at the edge of the fin in five very sensible projections. This brings it into the next of rank in the order of beings with the *Manati*. The tail is divided into two lobes, which lie horizontally, but do not fork, except a little at their base. The body is oblong, and rather slender, tapering from the back (which is a little elevated) to the tail. It is quite destitute of the dorsal fin.

Its length is from twelve to eighteen feet. It makes great use of its tail in swimming; for it bends that part under it, as a Lobster does its tail, and works it with such force as to dart along with the rapidity of an arrow.

SIZE.

A full account of the fish of the Whale kind, seen by the Reverend Dr. Borlase* between the *Land's End* and the *Scilly* islands, is a desideratum in the *British Natural History*. He describes them as being from twelve to fifteen feet long; some were milk-white, others brown, others spotted. They are called *Thornbacks*, from a sharp and broad fin on the back. This destroys my suspicion of their being of the above species.

* *Obs. Scilly Islands*, 3.

IV. WINGED.

BAT.

HIST. QUAD. GENUS XLIV.

82. NEW YORK.

Hist. Quad. N° 403.—*LEV. MUS.*

BAT. With the head like that of a Mouse: top of the nose a little bifid: ears broad, short, and rounded: in each jaw two canine teeth: no cutting teeth: tail very long, inclosed in the membrane, which is of a triangular form: the wings thin, naked, and dusky: bones of the hind legs very slender.

Head, body, and upper part of the membrane inclosing the tail, covered with very long hair of a bright tawny color, palest on the head, beginning of the back, and the belly: at the base of each wing is a white spot.

Length from nose to tail two inches and a half; tail, one inch eight-tenths: extent of the wings, ten inches and a half.

Inhabits the province of *New York*; and discovered by Dr. *Forster* * in *New Zealand*, in the *South Seas*.

83. LONG-HAIRED.

Mr. Clayton, in Ph. Transf. Abridg. iii. 594.

BAT. With long straggling hairs, and great ears.

The above is all the account we have of this species; which is said to be an inhabitant of *Virginia*.

Mr. *Lawson* says, that the common Bat is found in *Carolina* †.

* *Observations, &c.* 189.† *Hist. Carolina.* 125.

Hist. Quad. N° 407.—Great Bat, *Br. Zool.* i. N° 38.

84. NOCTULE?

BAT. With the nose slightly bilobated: ears small and rounded: on the chin a small wart: body of a cinereous red.

Extent of wings fifteen inches: body between two and three in length: tail, one inch seven-tenths.

Brought from *Hudson's Bay* in spirits. I saw it only in the bottle; but it appeared to be this species.



A. COMMON BAT, *Hist. Quad.* N° 411.—*Br. Zool.* i. N° 41.—*LEV. MUS.*

THIS species is found in *Iceland*, as I was informed by the late Mr. *Fleischer*, which is the most northernly residence of this genus. In *Asia* I can trace them no farther eastward than about the river *Argun*, beyond lake *Baikal*.

C L A S S



CLASS II. BIRDS.

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CLASS II. BIRDS.

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II. WATER BIRDS.

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Genus.

I. VULTURE.

II. FALCON.

III. OWL.

II. P I E S.

IV. SHRIKE.

V. PARROT.

VI. CROW.

* Roller.

VII. ORIOLE.

VIII. GRAKLE.

IX. CUCKOO.

Wryneck.

X. WOODPECKER.

XI. KINGFISHER.

XII. NUTHATCH.

XIII. TODY.

Hoopoe.

* The *Genera* which have not the number prefixed, are not found in *America*.

XIV. CREEPER.

Genus.

XIV. CREEPER.

XV. HONEY-SUCKER.

III. GALLINACEOUS.

XVI. TURKEY.

XVII. GROUS.

XVIII. PARTRIDGE.

XIX. BUSTARD.

IV. COLUMBINE.

XX. PIGEON.

V. PASSERRINE.

XXI. STARE.

XXII. THRUSH.

XXIII. CHATTERER.

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XXX. WARBLERS.

XXXI. TITMOUSE.

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DIV. II. WATER BIRDS.

VI. CLOVEN-FOOTED.

XXXIV. SPOONBILL.

XXXV. HERON.

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XXXVI. IBIS.

Genus.

- XXXVI. IBIS.
- XXXVII. CURLEW.
- XXXVIII. SNIPE.
- XXXIX. SANDPIPER.
- XL. PLOVER.
- XLI. OYSTER-CATCHER.
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VII. PINNATED FEET.

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CLASS

CLASS II. BIRDS.

DIV. I. LAND BIRDS.

ORDER I. RAPACIOUS.

I. VULTURE, *Gen. Birds I.*

Urubu, Aura Tzopilotl, *Mexic. Margrave*, 207, 208.—*Wil. Orn.* 68.—*Raii Syn.* 86. CARRION.
Av. 180.

Carrion Crow, *Sloane Jam.* ii. 294.—*Brown Jam.* 471.

Corvus Sylvaticus, *Berrere*, 129.

Gallinazo, *Ulloa Voy.* i. 60. 201.

Turkey Buzzard, *Josselyn*.—*Lawson*, 138.—*Catesby*, i. 6.—*Bancroft*, 152.—*Du Pratz*, ii. 77.

Vultur Aura, *Lin. Syst.* 122.—*De Buffon*, i. 175.—*Pl. Enl.* N° 187.

Le Vautour du Brasil, *Brissou*, i. 468.—*Latham*, i. 9. N° 5.—*LEV. MUS.*

W EIGHT four pounds and an half. Head small, covered with a naked wrinkled red skin, beset with black bristles. This gives it some resemblance to a Turkey; from which it derives one of the names. The nostrils are very large, and pervious: the whole plumage is dusky, dashed with purple and green: legs of a dirty flesh-color: claws black.

These birds are common from *Nova Scotia* to *Terra del Fuego*; but swarm in the hotter parts of *America*; and are found in the islands, where they are said to be far inferior in size to those of *North America*.

DESCRIPTION.

PLACE.

In

MANNERS.

In the warm climates they keep in vast flocks. Perch at night on rocks or trees; sitting with dishevelled wings to purify their bodies, which are most offensively fetid. Towards morning they take flight, soaring at a vast height, with the gentle motion of a kite; expecting notice of their banquet by the tainted effluvia of carrion, excrements, or any filth. They have most sagacious nostrils, and smell their prey at a vast distance; to which they resort from all quarters, wheeling about, and making a gradual descent till they reach the ground. They do not confine themselves to dead animals, but feed on Snakes, and sometimes on Lambs. They are very tame, and, while they are at their meals, will suffer a very near approach.

In the torrid zone, particularly about *Carthage*, they haunt inhabited places, and are seen in numbers sitting on the roofs of the houses, or walking along the streets with a sluggish pace. In those parts they are useful, as the IBIS in *Egypt*, devouring the noisome subjects, which would otherwise, by the intolerable stench, render the climate still more unwholesome than it is.

When these birds find no food in the cities, they are driven by hunger among the cattle of the neighboring pastures. If they see a beast with a sore on the back, they instantly alight on it, and attack the part affected. The poor animal attempts in vain to free itself from the devourers, rolling on the ground with hideous cries: but in vain; for the Vultures never quit hold, till they have effected its destruction. Sometimes an Eagle presides at the banquet, and keeps these cowardly birds at a distance, until it has finished its repast.

USES.

Mischievous as they are in a few instances, yet, by the wise and beneficent dispensations of Providence, they make in the hot climates full recompence, by lessening the number of those destructive animals the Alligators, which would otherwise become intolerable by
 3 their

their multitudes. During the season in which these reptiles lay their eggs in the sand, the Vultures will sit hid in the leaves of the trees, watching the coming of the female Alligator to deposit its eggs, who then covers them with sand, to secure them, as she imagines, from all danger: but no sooner does she retire into the water, than the birds dart on the spot, and with claws, wings, and beak, tear away the sand, and devour the whole contents of the depository.

No birds of this genus are found in northern regions of *Europe* or *Asia*, at least in those latitudes which might give them a pretence of appearing here. I cannot find them in our quarter of the globe higher than the *Grison Alps* *, or *Silesia* †; or at farthest *Kalish*, in *Great Poland* ‡. Certainly the Count *De Buffon* was misinformed as to the habitation of the species, which he ascribes to *Norway* ||. In the *Russian* dominions, the Bearded Vulture of Mr. *Edwards*, iii. tab. 106. breeds on the high rocks of the great *Altaic* chain, and beyond lake *Baikal* §; which may give it in *Europe* a latitude of 52. 20. in *Asia* of 55.

* *Wil. Orn.* 67. † *Schwenckfeldt av. Silesia*, 375. ‡ *Rzaczynski, Hist. Nat. Polon.* 298. || *Hist D'Oif.* i. 164.—*Pl. Enl.* 449.

§ *Dr. PALLAS's Catalogue of the Birds of the Russian empire*, which he favored me with in MS. my surest clue to the *Arctic* birds.

II. FALCON,

II. FALCON, *Gen. Birds* II.

86. A. SEA EAGLE.

Br. Zool. i. N^o 44.*Falco Officinalis*, *Lin. Syll.* 124.—*Latham*, i. 30.—*Pl. Enl.* 12. 415.Grey Eagle, *Lawson*, 137.Land Oern, *Leem*, 230.L'Orfraie, *De Buffon*, *pl.* 3.—*Lev. Mus.*

VARIES a little from the *British* species, and is much superior in size. The length three feet three inches; of wing, twenty-five inches.

Feathers on head, neck, and back, brown, edged with dirty white: chin white: breast and belly brown, spotted with white: coverts of wings brown, clouded; primaries black: tail dusky; the middle mottled with white: legs feathered half down.

PLACE.

Very common in the northern parts of *America*, and endures its severest winters, even as high as *Newfoundland*. These birds prey on sea fowls, as well as land, and on young Seals, which they seize floating, and carry out of the water.

Eagles, and all sorts of birds of prey, abound in *America*, where such quantity of game is found. Multitudes are always seen below the falls of *Niagara*, invited by the carcases of Deer, Bears, and other animals, which are so frequently hurried down in attempting to cross the river above this stupendous cataract.

This species is very frequent in *Kamtschatka*; and is found during summer even on the Arctic coast: is very common in *Russia* and *Siberia*; nor is it more rare about the *Caspian* sea, where they breed on the loftiest trees.

F. With

F. With the forehead brown: crown and hind part of the neck striped with brown, white, and rusty yellow: lower part of the neck, breast, and belly, of a deep brown: coverts of the wings, back, and secondaries and scapulars, of the same color; the two last white near the bottoms, mottled with brown; primaries black: middle feathers of the tail brown, crossed with two or three cinereous bands; the exterior, brown blotched with cinereous: legs clothed to the toes with pale brown feathers: toes yellow. Length, three feet. **BR. MUS.**

Inhabits *Hudson's Bay*, and seems a variety of the *Falco Chrysaetos*, *Lin. Syst.* 125. *Faun. Suec.* N° 54. *Le grand Aigle de Buffon*, i. 76. *Pl. Enl.* 410; and the Golden Eagle, *Br. Zool.* i. N° 42. *Latham*, i. 31. The chief difference consists in the color of the tail, which in the *European* kind is of a deep brown blotched with obscure ash.

In *Europe* it inhabits most parts, even as high as *Norway*; is found in *Asia*, about the southern parts of the *Uralian* mountains, and those which border the southern part of *Siberia*; but grows scarcer towards the east.

Latham, 33. x. N° 7. a.—**LEV. MUS.**

F. With a large bill, of a brownish yellow color: head, neck, breast, belly, thighs, and vent, white: back, wings, and tail, deep brown, three inches of the end of the tail excepted, which is white: the legs yellow, and very strong. Length, two feet nine inches.

Observed by Captain Cook, in *Kaye* island, off the coast of *America*, lat. 59. 49. north, in company with the White-headed Eagle.

86. B. GOLDEN
EAGLE.

PLACE.

86. C. WHITE-
BELLIED EAGLE.

PLACE.

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F. With

86. D. YELLOW-
HEADED EAGLE.

F. With dusky bill, cere, and irides : head and neck of a dirty yellow : back of a deep brown, each feather tipt with dirty yellow.

PLACE.

Appears in *Hudson's Bay*, in *April* : builds its nest in trees, with sticks and grafs : lays only one egg. It preys on the young of Deer, on Rabbits and birds. Retires southward in *October*. Is called by the *Indians*, *Ethenesue mickesue*.

The above was described from a specimen, in very bad condition, sent from *Hudson's Bay*. It was an Eagle of the middle size.

87. BLACK
EAGLE.

Br. Zool. i. N° 43.

Falco Fulvus, *Lin. Syst.* 125.—*Latham*, i. 32. N° 6.

White-tailed Eagle, *Edw.* i. 1.—*LEV. MUS.*

L'Aigle commun, *De Buffon*, i. 86.—*Pl. Enl.* 409.—*LEV. MUS.*

THE whole plumage is of a dusky-brown : the breast marked with triangular spots of white ; in which it varies from the *British* kind : the tail white, tipt with black ; but in young birds dusky, blotched with white : legs covered to the toes with soft rust-colored feathers : vent feathers of the same color.

PLACE.

Inhabits *Hudson's Bay*, and northern *Europe* as far as *Drontheim* *. Is found on the highest rocks of the *Uralian* chain, where it is not covered with wood † ; but is most frequent on the *Siberian*, where it makes its nest on the loftiest rocks. It is rather inferior in size to the *Sea Eagle* ; but is a generous, spirited, and docile bird. The independent *Tartars* train it for the chase of Hares, Foxes, Antelopes, and even Wolves. The use is of considerable antiquity ; for *Marco Polo*, the great traveller of 1269, observed and

* Especially in the winter, *Leems*, 233.

† *Dr. Pallas*.

admired

admired the diversion of the great *Cham* of *Tartary*; who had several Eagles, which were applied to the same purposes as they are at present*. I must add, that the *Tartars* esteem the feathers of the tail as the best they have for pluming their arrows.

The *Kalmucs* use, besides this species of Eagle, that which the *French* call *Jean le Blanc* †, and also the *Lanner*; all which breed among them: but people of rank, who are curious in their Falcons, procure from the *Bashkirians* the Gyr-falcon and the Peregrine, which inhabit the lofty mountains of the country ‡.

The *Falco Melanætos*, and the *F. Fulvus* of LINNÆUS, or my *Black Eagle*, are the same; the *F. fulvus* being only the young of the first. It is a scarce species in *Sweden*.—Mr. Oedman.

F. With a dusky and blue bill; yellow cere: head, neck, and breast, of a deep ash-color: each cheek marked with a broad black bar passing from the corner of the mouth beyond the eyes: back, belly, wings, and tail, black: legs yellow, feathered below the knees.

88. BLACK-CHEEKED EAGLE.

Is about the size of the last. Communicated to me by the late *Taylor White*, Esq; who informed me that it came from *North America*. Is described by Mr. *Latbam*, i. 35. N° 10; and seems to be the species engraven by *M. Robert*, among the birds in the menagery of *Louis XIV.*

SIZE, AND PLACE.

* *M. Polo*, in *Purchas*, iii. 85. in *Bergeron*, 74.

† *De Buffon*.

‡ *Extraits*, iii. 303. A name by which I quote an abridgement of the travels of *PALLAS*, *GMELIN*, *LEPECHIN*, and others, published by the SOCIÉTÉ TYPOGRAPHIQUE, at *Bern*, under the title of *HISTOIRE DES DECOUVERTES*, faites par divers savans voyageurs dans plusieurs contrées de la *Russie* et de la *Perse*, 4 vols. 8vo.

WHITE-HEADED EAGLE.

89. WHITE-
HEADED EAGLE.Falco Leucocephalus, *Lin. Syst.* 124.Bald Eagle, *Lawson*, 137.—*Catesby*, i. 10.—*Brickell*, 173.—*Latbom*, i. 29.—
LEV. MUS.Le Pygargue a tête blanche, *De Buffon*, i. 99.—*Pl. Enl.* 411.—LEV. MUS.

BILL, cere, and feet, pale yellow: head, neck, and tail, of a pure white: body and wings of a chocolate-color. It does not acquire its white head till the second year

MANNERS.

This Eagle is lesser than the foregoing species, but of great spirit: preys on Fawns, Pigs, Lambs, and fish: is the terror of the Osprey, whose motions it watches. The moment the latter has seized a fish, the former pursues till the Osprey drops its prey; which, with amazing dexterity, it catches before it falls to the ground, be the distance ever so great. This is matter of great amusement to the inhabitants of *North America*, who often watch their aerial contests. This species frequently attends the sportsman, and snatches up the game he has shot, before he can reach it.

These birds build in vast decayed cypresses †, or pines, impending over the sea, or some great river, in company with Ospreys, Herons, and other birds: and their nests are so numerous, as to resemble a rookery. The nests are very large, and very fetid by reason of the reliques of their prey. *Lawson* says, they breed very often, laying again under their callow young; whose warmth hatches the eggs. In *Bering's* isle they make their nests on the cliffs, near six feet wide, and one thick; and lay two eggs in the beginning of July.

* Le Pygargue a tête blanche, *De Buffon*, i. 99.—*Pl. Enl.* 411.

† *Catesby*.

THIS

THIS most beautiful and scarce species is entirely white, except the tips of the wings, which are black. We know nothing of this bird, but what is collected from *Du Pratz* *. The natives of *Louisiana* set a high value on the feathers, and give a large price for those of the wings; with them they adorn the Calumet, or pipe of peace. Different nations make use of the wings, or feathers of different birds; but, according to *Hennepin*, always decorate it with the most beautiful.

The Calumet is an instrument of the first importance among the *Americans*. It is nothing more than a pipe, whose bowl is generally made of a soft red marble †; the tube of a very long reed, ornamented with the wings and feathers of birds. No affair of consequence is transacted without the Calumet. It ever appears in meetings of commerce, or exchanges; in congresses for determining of peace or war; and even in the very fury of a battle. The acceptance of the Calumet is a mark of concurrence with the terms proposed; as the refusal is a certain mark of rejection. Even in the rage of a conflict this pipe is sometimes offered; and if accepted, the weapons of destruction instantly drop from their hands, and a truce ensues. It seems the sacrament of the Savages; for no compact is ever violated, which is confirmed by a whiff from this holy reed. The *Dance of the Calumet* is a solemn rite which always confirms a peace, or precedes a war. It is divided into three parts: the first, appears an act of devotion, danced in measured time: the second, is a true representation of the Pyrrhic dance ‡: the third, is attended with songs expressive of the victories they had obtained, the nations they had conquered, and the captives they had made.

90. WHITE
EAGLE.

CALUMET.

* *Du Pratz*, ii. 75.—*Latbam*, i. 36.

† *Du Pratz*, i. 298.—*Kalm*, iii. 230.

‡ *Strabo*, lib. x. p. 736. edit. *Amstel.* 1707.

From

From the winged ornaments of the *Calumet*, and its conciliating uses, writers compare it to the *Caduceus* of *Mercury*, which was carried by the *Caduceatores*, or messengers of peace, with terms to the hostile states. It is singular, that the most remote nations, and the most opposite in their other customs and manners, should in some things have, as it were, a certain consent of thought. The *Greeks* and the *Americans* had the same idea, in the invention of the *Caduceus* of the one, and the *Calumet* of the other. Some authors imagine, that among the *Greeks* the wings were meant as a symbol of eloquence. I rather think that the twisted Serpents expressed that insinuating faculty; and that the emblem was originally taken from the fatal effect the rhetoric of *Satan* had on our great mother, when he assumed the form of that reptile, which the highest authority represents as *more subtle than any beast of the field*. On this the heathen mythology formed their tale of *Jupiter* taking the figure of a Serpent, to insinuate himself into the good graces of *Olympias*; who, like *Eve*, fell a victim to his persuasive tongue. As to the wings, it is most probable that they were to shew the flight of discord; which the reconciled parties gave, with all the horrors of war, to the air, and sport of the winds.

The *Oole*, or Eagle, is a sacred bird among the *Americans*. In case of sickness, they invoke this bird to descend from heaven (which in its exalted flight it approaches nearer than any other) and bring down refreshing things; as it can dart down on its rapid wing quick as a flash of lightning*.

* *Adair's Hist. Am. Indians*, 179.

Fishing Hawk, *Catesby*, i. 2.—*Lawson*, 137.—*Brickell*, 173.

Osprey, *Jesselyn's Rarities*, ii.—*Br. Zool.* i. N° 46.—*Latham*, i. 45.

Le Balbuzard, *De Buffon*, i. 103. pl. 2.

Falco *Haiætus*. Blafot. Fisk-orn, *Faun. Suec.* N° 63.

Fisk Gjoë, *Leem*, 234.—*Pl. Enl.* 414.—*LEV. MUS.*

91. OSPREY.

F. With blue cere, and feet: head, and lower part of the body, white: upper part brown: two middle feathers of the tail plain brown; the rest barred with white and brown.

This, in all respects, resembles the *European* kind. Notwithstanding it is so persecuted by the *Bald Eagle*, yet it always keeps near its haunts. It is a species of vast quickness of sight; and will see a fish near the surface from a great distance*: descend with prodigious rapidity, and carry the prey with an exulting scream high into the air. The Eagle hears the note, and instantly attacks the Osprey; who drops the fish, which the former catches before it can reach the ground, or water. It sometimes happens that the Osprey perishes in taking its prey; for if it chances to fix its talons in an over-grown fish, it is drawn under water before it can disengage itself, and is drowned.

MANNERS,

It is very frequent in *Kamtschaska*; and in summer, even under the *Arctic* zone of *Europe* and *Asia*. Is very common in *Siberia*, and spreads far north; probably common to the north of *America*, and *Asia*. Is rare in *Russia*. It is likewise very frequent as low on the *Volga* as the tract between *Syfran* and *Saratoff*, where they are said to be the support of the *Ern Eagle*, as they are of the White-tailed Eagle in *America*, each living by the labors of the Osprey.

PLACE.

* That agreeable traveller, the Reverend Dr. *Burnaby*, adds, that it is often seen resting on the wing for some minutes, without any visible change of place, before it descends. *Travels in America*, 2d ed. p. 48.

The

G Y R F A L C O N.

The *Tartars* have a superstition, that a wound from its claws is mortal, either to man or fish, and consequently dread its attack *.

The Osprey returns into *Sweden* later than the Kite. Mr. *Oedman* flings new light on the history of this bird: he says that it breeds on the tops of the highest trees, and makes its nest, with wonderful art, of the twigs of the fir-tree, and lines the bottom with *polypodies*. It lays three eggs, of the size of those of a Hen, marbled with rust-color. It brings fish and serpents to feed its young; and even eels of a vast size: this makes its nest very foetid. It does not prey on birds, but on fish only. It defends its nest with great spirit.

91*. GYRFALCON, *Br. Zool.* N° 47. tab. xix.—*Latham*, i. 71. N° 50, A. and N° 50, B. 1st paragr. and 83. N° 69.

Falco Islandus, *Faun. Greenl.* 58. N° 35.—*Brunnich*, N° 7, 8.—*Grantz*, i. 78.—*Egede*, 64.—*Horrebow*, 58.—*LEV. MUS.*

F. With a yellow cere: bluish bill, greatly hooked: eye dark blue: the throat of a pure white: the whole body, wings, and tail, of the same color, most elegantly marked with dusky bars, lines, or spots, leaving the white the far prevailing color. There are instances, but rare, of its being found entirely white. In some, the whole tail is crossed by remote bars of black or brown; in others, they appear only very faintly on the middle feathers: the feathers of the thighs are very long, and unspotted: the legs strong, and of a light blue.

SIZE.

Its weight forty-five ounces Troy: length near two feet: extent four feet two. Of the same manners and haunts with the *Greenland Falcon*.

PLACE.

Is very frequent in *Iceland*; is found in *Lapmark* †, and *Norway* ‡;

* *Extrañs*, i. 479.

† *Leems*, 235.

‡ *Sivom*.

and

and rarely in the *Orknies*, and *North Britain*. In *Asia*, it dwells in the highest points of the *Uralian* and other *Siberian* mountains, and dares the coldest climates throughout the year. It is kept, in the latitude of *Petersburg*, uninjured in the open air during the severest winters, when the *Peregrine Falcon*, N° 97, loses its claws by the frost.

VERY HARDY.

Mr. *Hutchins* * has often observed it about *Albany* fort, where it appears in *May*, and retires before winter. It feeds on the white, and other Grouse.

This species is pre-eminent in courage as well as beauty, and is the terror of other Hawks. It was flown at all kinds of fowl, how great soever they were; but its chief game used to be Herons and Cranes.

Falco Lagopus, *Brunnich*, N° 15.—*Leems Lapm.* 236.

Rough-legged Falcon, *Br. Zool. ii. App.* 529.—*Latham*, i. 75.—*LEV. MUS.*

92. ROUGH-
LEGGED.

F. With a yellow cere, and feet: head, neck, and breast, of a yellowish white, marked with a few oblong brown spots: belly of a deep brown: thighs white, striped with brown: scapulars blotched with yellowish white and brown: coverts of the wings edged with rust-color; primaries black: tail, little longer than the wings; the part next to the rump white; the end marked with a black bar; the tips white: legs feathered to the toes: feet yellow. Length two feet two inches.

SIZE.

* At the time this sheet was printing, I had the good fortune to meet with Mr. *Hutchins*, surgeon, a gentleman many years resident in *Hudson's Bay*; who, with the utmost liberality, communicated to me his MS. observations, in a large folio volume: in every page of which his extensive knowledge appears. The benefit which this work will, from the present page, receive, is here once for all gratefully acknowledged.

VOL. I.

H h

Inhabits

ST. JOHN'S AND CHOCOLATE FALCON.

PLACE.

Inhabits *England, Norway, Lapmark, and North America.* Was shot in *Connecticut.*

93. ST. JOHN'S.

Latham, i. 77. N° 58.

F. With a short dusky bill: head of a deep brown: hind part of the neck, back, scapulars, and coverts of the tail, marked with bars of black, and dull white, pointing obliquely: coverts of the wings deep brown; the greater spotted on their inner sides with white; the primaries dusky, the lower part white, barred with deep ash-color and black: the under side of the body brown, marked sparingly with white and yellowish spots: tail shorter than the extremity of the wings; the end white; beneath that is a bar of black, succeeded by two or three black and cinereous bands; the rest of the tail marked with broad bars of white, and narrower of ash-color: the legs are clothed with feathers to the toes, which are yellow, and very short.

SIZE.

Length, one foot nine inches.

PLACE.

Inhabits *Hudson's Bay and Newfoundland.* BL. MUS.

94. CHOCOLATE-COLORED.

Latham, i. 54. N° 34. A; 76. N° 57.

F. With a short and black bill, and yellow cere. The whole plumage of a deep bay or chocolate-color, in parts tinged with ferruginous: primaries black; the lower exterior sides of a pure white, forming a conspicuous spot or speculum: the wings reach to the end of the tail: the exterior sides of the five outmost feathers of the tail dusky, their inner sides blotched with black and white; the two middle, black and cinereous: the legs and toes feathered; the last remarkably short. LENGTH one foot ten inches.

Inhabits



del G. J. J. J. J.

S. John's Falcon N.º 93.

P. Mac-Cl. J. J. J.

Chocolate Colored Falcon N.º 94.

NEWFOUNDLAND AND SACRE FALCON.

235

Inhabits *Hudson's Bay* and *Newfoundland*. Preys much on Ducks. Sits on a rock and watches their rising, when it instantly strikes at them.

PLACE.

Latbam, i. 79. N° 60.

95. NEWFOUND-
LAND.

F. With a yellow cere: deep yellow irides: hind part of the head ferruginous: crown, back, scapulars, and coverts of wings, brown, edged with a paler color: belly rust-colored, blotched with deeper shades: thighs of a mottled ash, marked with round dusky spots, and on the lower parts with four large dark blotches: the tail crossed by four bars of deeper and lighter brown: legs yellow, strong, and feathered half way down. LENGTH twenty inches. The description borrowed from Mr. *Latbam*.

Inhabits *Newfoundland*.

PLACE.

Belon, *Hist. des Ois.* 108.—*Buffon*, i. 246.

Speckled Partridge Hawk of *Hudson's Bay*, *Phil. Transf.* lxii. 383.—*Latbam*, i. 78. N° 58, 59.

96. SACRE.

F. With a dusky bill; upper mandible toothed: irides yellow: cere and legs bluish. Head, and upper part of the body, of a dusky brown: hind part of the head mottled with white: whole under side of the body, from chin to vent, white; the middle of each feather marked with a dusky spot: wings reach almost to the end of the tail: coverts, scapulars, and primaries, of a deep brown, elegantly barred transversely with white: tail brown, marked on each side with oval transverse spots of red: feathers on the thighs very long, brown spotted with white: the fore part of the legs covered

STREAKED AND PEREGRINE FALCON.

vered with feathers almost to the feet. LENGTH two feet. Weight two pounds and an half.

PLACE.

Inhabits *Hudson's Bay* and *Newfoundland*: found also in *Tartary*, and is a species celebrated there for the sport of falconry. It is a hardy species; for it never quits the rigorous climate of *Hudson's Bay*. Preys on the White Grouse, which it will seize even while the fowler is driving them into his nets. It breeds in *April* and *May*, in desert places. The young fly in the middle of *June*. The females are said to lay only two eggs.

STREAKED
FALCON.

F. With a very sharp bill, furnished with a large and pointed process in the upper mandible: cere yellowish: head, front of the neck, breast, and belly, white; each feather marked along the shaft with a streak of brown; the narrowest are on the head: back and coverts of the wings of a dirty bluish ash-color; edges of the feathers whitish, and many of them tipped with the same: primaries dusky; exterior webs blotched with white, interior barred with the same: tail of the same color with the back, and barred with white; the bars do not reach the shafts, and, like those in the *Iceland Falcon*, oppose the dark bars on the adverse side: legs bluish. Length two feet two inches.

This fine species inhabits *Hudson's Bay*.

97. PEREGRINE.

Br. Zool. i. N° 48.—*Latham*, i. 68, N° 49; 73. N° 52.

Spotted Hawk, or Falcon; and Black Falcon, *Edw.* i. 3, 4.

Le Faucon, *De Buffon*, i. 249. pl. 16.—*LEV. MUS.*

F. With a short strong bill, toothed on the upper mandible, of a bluish color: cere yellow: irides hazel: forehead whitish: crown, and hind part of the head, dusky: the back, scapulars, and coverts

coverts of wings, elegantly barred with deep blue and black: the primaries dusky, with transverse oval white spots: the throat, chin, and breast, of a pure white, the last marked with a few dusky lines pointing down: the belly white, crossed with numerous dusky bars, pointed in the middle: legs yellow: toes very long.

The *American* species is larger than the *European*. They are subject to vary. The Black Falcon, and the Spotted Falcon of Mr. *Edwards*, are of this kind; each preserve a specific mark, in the black stroke which drops from beneath the eyes, down towards the neck. The differences in the marks in the tail may possibly proceed from the different ages of the birds; for few kinds differ so much in the several periods of life as the Rapacious.

Inhabits different parts of *North America*, from *Hudson's Bay* as low as *Carolina*. In *Asia*, is found on the highest parts of the *Uralian* and *Siberian* chain. Wanders in summer to the very Arctic circle. Is common in *Kamtschatka*.

PLACE.

Gentil Falcon, *Br. Zool.* i. N° 50.

F. Gentilis. *Falk. Faun. Suec.* N° 58.—*Latham*, i. 64.—*LEV. MUS.*

98. GENTIL.

F. With a dusky bill: yellow cere, irides, and legs: head and upper side of the neck ferruginous, streaked with black: under side, from chin to tail, white, marked with dusky heart-shaped spots: back, coverts of wings, and scapulars, brown, edged with rust-color: primaries dusky, barred on the exterior side with black: wings reach only half the length of the tail: tail long, barred with four or five broad bands of black cinereous; each of the first bounded by a narrow line of dirty white.

In

G O S H A W K F A L C O N.

SIZE.
PLACE.

In size superior to the *European* kind, being two feet two inches long. Shot in the province of *New York*. Is found in northern *Europe*, as far as *Finmark* *.

99. GOSHAWK.

Br. Zool. i. N° 52.

F. Palumbarius, Faun. Suec. N° 67.—*De Buffon*, i. 230.—*Latham*, i. 58.—*LEV. Mus.*

F. With a bluish bill, black at the tip: yellowish green cere: yellow legs: head brown; hind part mottled with white: over each eye extends a long whitish line: hind part of the neck, back, and wings, of a deep brown color: breast and belly white, crossed with numerous undulated lines of brown: tail of a cinereous brown, crossed by four or five bars of black: wings shorter than the tail.

PLACE.

A WHITE VA-
RIETY.

EXCELLENT FOR
FALCONRY.

That which I saw in the *Leverian Museum*, was superior in size to the *European*. Mr. *Lawson* says, they abound in *Carolina*: are spirited birds, but lesser than those of *Muscovy*. Is common in that country, and *Siberia*. Dr. *Pallas* adds, that there is a large white variety on the *Urallian* mountains, mottled with brown and yellow. These are yet more frequent in the east part of *Siberia*; and in *Kamtschatka* they are entirely white. These are the best of all Hawks for falconry. They extend to the river *Amur*; and are used by the emperor of *China* in his sporting progresses †, attended by his grand falconer, and a thousand of the subordinate. Every bird has a silver plate fastened to its foot, with the name of the falconer who had the charge of it; that in case it should be lost, it might be brought to the proper person: but if he could not be found, the

* *Leem*, 337.—*Strom*, 224.

† *Bell*, ii. 87.

bird

bird is delivered to another officer, called the *Guardian of lost birds*; who keeps it till it is demanded by the falconer to whom it belonged. That this great officer may the more readily be found, among the army of hunters, who attend the emperor, he erects a standard in the most conspicuous place*.

The emperor often carries a Hawk on his hand, to let fly at any game which presents itself; which are usually Pheasants, Partridges, Quails, or Cranes. *Marco Polo* saw this diversion about the year 1269†; a proof of its antiquity in these parts, when it formed so regular and princely an establishment in the state of this great eastern monarch; the origin of which might have been in some long preceding age. The custom of carrying a Falcon extended to many countries, and was esteemed a distinction of a man of rank. The *Wellsb* had a saying, that you may know a gentleman by his *Hawk, Horse, and Grebound*. In fact, a person of rank seldom went without one on his hand. *Harold*, afterwards king of *England*, is painted going on a most important embassy, with a Hawk on his hand, and a Dog under his arm‡. *Henry VI.* is represented at his nuptials, attended by a nobleman and his Falcon§. Even the ladies were not without them in earlier times; for in an antient sculpture in the church of *Milton Abbas*, in *Dorsetshire*, appears the consort of King *Atbelstan* with a Falcon on her royal fist || tearing a bird: and, perhaps to indulge his queen in her passion for the diversion, he demanded of my countrymen (besides an immense tribute) some of their most excellent Hounds, and of their best Hawks: which proves the high esteem in which our Dogs and Falcons were held in those early days ¶.

* *Bergeron*, 75, 76.

† The same.

‡ *Monumens de la Monarchie Française*,

i. 372. § *Mr. Walpole's Anecdotes of Painting*, i. 33.

|| *Hutchins's Dorsetshire*,

ii. 443. ¶ *Malmesbury*, lib. ii. c. 6.

RED-TAILED AND LEVERIAN FALCON.

Julius Firmicus, a celebrated writer in astrology, who dedicated his books to *Mavortius Lollius*, consul in 354, affirms, that whoever were born under the influence of *Mercury* and *Virgo*, would be strong and industrious, and be well skilled in breeding fine horses, and in training Hawks and Falcons, and other birds useful in bird-catching, &c. By this it appears, that actual falconry was in use long before the time I imagined.

100. RED-TAILED.

American Buzzard, *Latham*, i. 50.—LEV. MUS.

F. With a dusky bill, and yellow cere: head, lower part of the neck, and chin, brown, mixed with white: breast and belly white, varied with long stripes of brown, pointing downwards: femoral feathers very long, white, and marked with long dentated stripes of pale brown: upper part of the neck, and back, of a very deep brown: coverts and tertials brown, barred or edged with white: primaries dusky, barred with cinereous: tail of a pale rust-color, marked near the end with a dusky narrow bar: legs yellow. Size of the *Goshawk*.

PLACE.

Inhabits *North America*. Sent from *Carolina* to Sir *Ashton Lever*.

101. LEVERIAN.

F. With a dusky bill, greatly hooked: head striped with brown and white: upper part of the body and wings of a deep brown; each feather elegantly marked at the end with a large white spot: the whole under side of the body white: the outmost feathers of the tail marked with nine white, and the same number of dusky bars; middle feathers with dusky and cinereous: the wings extend beyond the end of the tail: legs strong and yellow.

PLACE.

Size of a Buzzard. Sent to Sir *Ashton Lever* from *Carolina*.

Barred.

Barred-breasted F. *Latham*, i. 56, N° 36.—*LEV. MUS.*

103. RED-SHOULDERED.

F. With a slender dusky bill; yellow cere; and legs, head, and neck, of a yellowish white, streaked downwards with dusky lines: back of a deep brown, edged with rust-color: lesser coverts of wings ferruginous, spotted with black; primaries and secondaries black, spotted on each side most distinctly with white: breast and belly of a light tawny; the first streaked downwards with black; the last traversed with deeper tawny: tail short and dusky, crossed by seven narrow bands of white; the two nearest to the ends more remote than the others: legs weak. **LENGTH** twenty-two inches.

Inhabits *Long Island*. This is a new species, preserved in Mrs. BLACKBURN'S *Museum*.

PLACE.

Ash-colored Buzzard, *Edw.* ii. 53.—*Latham*, i. 55, N° 35. 48; N° 28.—*De Buffon*, i. 223.

103. BUZZARD.

Falco Buteo. *Quidfogel, Faun. Suec.* N° 60.—*Br. Zool.* i. 54.—*LEV. MUS.*

F. With a dusky bill, and bluish yellow cere: head, and hind part of the neck, of a cinereous brown, streaked with yellow: back brown; lower part and rump barred with rust-color, sometimes with white: the coverts of the wings brown; the greater and scapulars spotted with white; the three first quill-feathers black, white at their bases; the interior webs of the rest blotched with black and white: the throat and breast yellowish, marked thinly with oblong brown spots: belly white, varied with great spots of brown: feathers of the thighs long, white, crossed with sagittal bars

BUZZARD, AND PLAIN FALCON.

of yellow: tail marked with about nine bands of black and light cinereous; the tip white: legs short, strong, and yellow. LENGTH two feet two inches.

PLACE.

The *American* varies in size, and sometimes slightly in color; but in both has so much the habit of the *English* Buzzard, as not to merit separation. It is called in *New York*, the great Hen Hawk, from its feeding on poultry. It continues there the whole year. Lays in *May* five eggs: the young fly about the middle of *June*. It is also an inhabitant of *Hudson's Bay* and *Newfoundland*; and in *Europe* as high as *Sondmor*, in *Norway*; where, from its attacking the Eagle, it is called *Orne-Falk*. Migrates, before winter, from *Sweden*. Is scarce in *Russia*; and very few are found in *Siberia*. Is found in winter as low as *Woronesch* *.

104. PLAIN.

F. With the bill black: head dusky: nape spotted with white: back, and coverts of wings, and tail, of an uniform deep brown: under side of the neck, breast, and belly, and thighs, deep brown, slightly spotted with white: primaries dusky; inner webs marked with great oval spots of white, mottled with brown: middle feathers of the tail plain brown; inner webs of the rest mottled with white; exterior webs and ends slightly edged with the same: legs strong: yellow? Wing reaches near the length of the tail. LENGTH, from bill to tail, two foot one.

PLACE.

Inhabits *Hudson's Bay*.

* In *Russia*, lat. 52 north.

Marsh Hawk, *Edw.* iv. 291.—*Latham*, i. 90.—*LEV. MUS.*—*BL. MUS.*

105: MARSH.

F. With a bluish bill; orange cere, orbits, and legs: irides hazel: a black line extends from the corner of the bill beyond the eyes; above that is another of white, which encircles the cheeks, and meets in front of the neck: head, throat, and upper part of the breast, varied with black and rust-color: back, and coverts of the wings, brown: rump white: breast and belly, and thighs, of a bright ferruginous: tail dusky brown, crossed by four black bands: legs strong, thick, and short; which are specific distinctions from the next. LENGTH two feet.

Inhabits *Pennsylvania*: frequents, during the summer, marshy places; where it feeds on the small birds, Frogs, Snakes, and Lizards. At approach of winter quits the country.

PLACE.

Br. Zool. i. No 59.—*Edw.* iii. 107.—*Latham*, i. Nos 75, 75 A, and No 34, is a rust-colored variety.

Falco Pygargus, *F. Hudsonius*, *Lin. Syst.* 128.—*Muller*, No 72.—*BL. MUS.*

106. RINGTAIL.

F. With a dusky bill and yellow cere: a white line over each eye: head, upper part of the neck, and back, dusky brown: coverts and primaries of the same color; the inner sides of the last white: breast, belly, and thighs, whitish, marked with ferruginous spots: vent and rump white, encircling the root of the tail: the middle feathers of the tail dusky; the next of a bluish ash-color; the outmost white, all marked transversely with orange bars: legs long, and very slender.

This species is superior in size to the *British* Ringtail; but, having most of the characters of that bird, we doubt not but that it is the

SIZE.

WINTER FALCON.

fame. Like the *European* kind, skims along the ground in search of prey, which is Mice, Frogs, and small birds. Builds its nest indifferently on the ground, or on the lower parts of trees. It is subject to vary to a deep rust-color; plain, except on the rump and tail.

SIZE AND PLACE. Inhabits *Hudson's Bay*. Weight, in *Hudson's Bay*, seventeen ounces and a half. Length twenty-one inches. Extent three feet seven. Is very common in the open and temperate parts of *Russia* and *Siberia*; and extends as far as lake *Baikal* *. It is not found far in the north of *Europe*. *Linnaeus* omits it among the birds of his country; but Mr. *Brumick* describes one, which had been shot in lat. 58, on the little island of *Christiansoe* †.

107. WINTER.

F. With a black bill; yellow cere: head of a deep brown: back the same, tinged with rust: hind part of the neck streaked with white: the coverts of the wings dusky, edged with dull white; those on the ridge with orange; ends of the primaries dusky; the other parts barred with brown and white: breast and belly white, marked with heart-shaped spots: thighs sulphur-colored, speckled with dusky: vent feathers white: tip of the tail white; then succeeds a broad dusky bar; the remaining part barred with brown, tawny, and black: legs long, and very slender.

SIZE.

PLACE.

Is of an elegant form, and about the size of the RINGTAIL.

Inhabits the province of *New York*: appears at approach of winter, and retires in the spring. BL. MUS.

Mr. *Latham's* Northern Falcon, N° 62, seems to differ from this only in age, or sex.

* DR. PALLAS.

† In the *Baltic*, a little north-east of *Bornholm*.

l in search
ds its nest
ees. It is
the rump

seventeen
three feet
s of *Russia*
found far
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n shot in

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Hirundo



Swallow-tailed Falcon N^o. 108.

J. Mead del.

Hirundo maxima Peruviana, avis prædatoris calcaribus instructa, *Feuillee Voy.*

Peru, tom. ii. 33.

Herring, or Swallow-tailed Hawk, *Lawson*, 138.—*Brickell*, 175.—*Catesby*, i. 4.

Le Melan de la Caroline, *Briffon*, i. 118.—*De Buffon*, i. 221.

Falco Furcatus, *Lin. Syff.* 129.—*Latham*, i. 60.—*LEV. MUS.*

108. SWALLOW-TAILED.

F. With a black bill, less hooked than usual with rapacious birds; base of the bill hid in feathers, and bristly: the eyes large; irides red: head, neck, breast, and belly, of a snowy whiteness: back, coverts of wings, and scapulars, black, glossed with purple and green: inner webs of the primaries and secondaries white towards their base; the tertials white: tail of the same color with the back; and most extremely forked; the outmost feather above eight inches longer than the middlemost: the legs yellow.

This most elegant species inhabits only the southern parts of *North America*; and that only during summer. Like Swallows, they feed chiefly flying; for they are much on wing, and prey on various sorts of insects. They also feed on Lizards and Serpents; and will kill the largest of the regions it frequents with the utmost ease. They quit *North America* before winter. We are not acquainted with their retreat. It probably is in *Peru*: at least we have the proof of one being taken in the South-sea, off the coast which lies between *Ulo* and *Arica*, in about the latitude 23 south, on September 11th, by the reverend the Father *Louis Feuillee*.*

PLACE.

F. With dusky bill: head, cheeks, neck, breast, and belly, white, marked with large brown spots, more sparingly dispersed over the breast and belly: lesser coverts brown; the others

109. BUZZARDET.

* *Journal des Observ. &c.* vol. ii. 33.

colored

L I T T L E F A L C O N.

colored like the head: primaries dusky: thighs white, with small sagittal spots of brown: tail dusky, barred and tipped with white: legs yellow. LENGTH fifteen inches. It has much the habit of the Buzzard; but the legs in proportion are rather longer.

In the LEVERIAN Museum. Except in the almost uniform color of the tail, Mr. *Latham's* species, p. 97, N° 83, agrees with this.

HIC. LITTLE.

Little Hawk, *Catesby*, i. 5.—*Latham*, i. 110. N° 94.

Emerillon de Cayenne, *Buffon*, i. 291.—*Pl. Enl.* N° 444.

Falco Sparverius, *Lin. Syst.* 128.—*LEV. MUS.*—*BL. MUS.*

M A L E.

F. With bluish bill, and yellow cere: crown of fine light grey, with a red spot in the middle; on the hind part a semicircle formed of round black spots: cheeks white, bounded on each side with a large black spot: throat white: breast of a pale yellow, spotted with black: back of a brilliant bay, crossed by broad black bars: coverts of the wings of a beautiful grey, thinly spotted with black; primaries black, spotted on their inner webs with white: tail long; the middle feathers barred near the end with a black band, and tipped with white; the two exterior feathers white, crossed with three or four black bars: legs yellow.

SIZE.

Length eleven inches and a half. Weight only three ounces and an half. This varies in color from the female, in the same manner as the *European* Kestrels.

PLACE.

These birds inhabit *America*, from *Nova Scotia* to the *Antilles*; are active and spirited. They prey on small birds, Mice, Lizards, and insects. The FEMALE is the following.

Emerillon .

Emerillon de St. Domingue, *De Buffon*, i. 291.—*Pl. Enl.* N° 465.—*Latbam*, i. 111.
N° 95.—*LEV. MUS.*—*BL. MUS.*

F. With a short and very crooked bill : crown of a deep slaty blue, obscurely spotted with red : hind part of the neck, back, and tail, of a bright ferruginous color and black, elegantly disposed in narrow transverse bars : coverts of the wings of the same colors ; primaries black : under side of the neck, breast, and belly, of a dirty white, marked with large ferruginous spots : thighs and vent feathers white : legs long, slender, and orange-colored : tail long, crossed with eleven black, and the same number of bright ferruginous bars.

The *New York* Merlin of Mr. *Latbam*, i. 107. N° 94, bears so great a resemblance to this, that I do not venture to separate them.

Pigeon Hawk, *Catesby*, i. 3.—*Phil. Transf.* lxii. 382.—*Latbam*, i. 101.
Falco Columbarius, *Lin. Syst.* 128.—*LEV. MUS.*—*BL. MUS.*

III. PIGEON.

F. With a dusky bill, and yellow cere : crown, back, and coverts of the wings and rump, of a bluish grey, with the middle of each feather streaked with black : the hind part of the head spotted with reddish white : cheeks and under side of the body white, with large oblong spots of black : primaries and secondaries dusky ; their insides marked with great oval spots of white : tail long ; black tip with white, and crossed with four bars of bluish grey : legs yellow.

Its length is from ten to twelve inches. The weight six ounces.

It inhabits *America*, from *Hudson's Bay* as low as *South Carolina*. In the last it attains to a larger size. In *Hudson's Bay* it appears in

SIZE.

PLACE.

May

DUBIOUS, AND DUSKY FALCON.

May on the banks of *Severn* river, breeds, and retires south in autumn. It feeds on small birds; and on the approach of any person, flies in circles, and makes a great shrieking. It forms its nest in a rock, or some hollow tree, with sticks and grass; and lines it with feathers: and lays from two to four eggs, white, spotted with red. In *Carolina* it preys on Pigeons, and young of the wild Turkeys.

112. DUBIOUS.

F. With a dusky bill: yellow cere and irides: head dusky, streaked with rust-color: back and coverts of wings brown, edged with rust: the primaries dusky ash-color, barred with black, and the inner webs marked transversely with oval ferruginous spots: tail long, of a deep cinereous, with four broad bars of black: breast and belly dirty white, marked with oblong streaks of brown: legs yellow.

SIZE.

Length about ten inches. Weight six ounces. In the marks and colors of the tail it much resembles the Sparrow Hawk: in the spots on the breast it agrees with the *English* Merlin.

PLACE.

Inhabits *New York* and *Carolina*. I have my doubts whether this is any more than a variety of the preceding, especially as the *English* SPARROW HAWK varies with the same colors.

113. DUSKY.

F. With a bluish bill; upper mandible armed with a sharp process; yellow cere: head, back, and coverts of the wings, and tail, a dusky brown, slightly edged with ferruginous: hind part of the neck spotted with white: primaries dusky; inner webs marked with oval spots of a pale rust-color: tail *short*, tipped with white, and barred with four broad dusky strokes, and the same number of narrow ones of white: the hind part of the head spotted with

with white : from the chin to the tail whitish, streaked downwards with distinct lines of black : legs deep yellow.

Inferior in size to the last. Inhabits the province of *New York*. SIZE, AND PLACE.
BL. MUS.



- A. CINEREOUS EAGLE, *Br. Zool.* i. N° 45.—*Latham*, i. 33.
Vultur Albicilla, *Lin. Syst.* 123.

F. With pale yellow bill, irides, cere, and feet : plumage light cinereous : body and coverts of the wings clouded with darker : primaries dusky : tail white.

In size equal to the Black Eagle. Inhabits *Europe*, as high as *Iceland* and *Lapmark* *. Is common in *Greenland* ; but does not extend to *America* : at least, if it does, it varies into the White-headed Eagle, to which it has great affinity, in particular in its feeding much on fish : the *Danes* therefore call it *Fiske-orn* †. Is common in the south of *Russia*, and about the *Volga*, as far as trees will grow. Is very scarce in *Siberia* ; but has been observed in the eastern parts about *Nertschink*. It seems to be the species called by the *Tungusi*, *Elo* ; which breeds on the banks of the *Khariousowa*, a river which falls into the *Penshina* sea ‡.

It inhabits *Greenland* the whole year, sitting on the rocks with flagging wing, and flies slowly. It makes its nest on the lofty

* *Leem*, 331.

† *Brunnick*, N° 12.

‡ *Hist. Kamtschatka*, 501.

CINEREOUS EAGLE.

cliffs, with twigs, lining the middle with mosses and feathers. Lays two eggs. Sits in the latter end of *May*, or beginning of *June*.

These birds prey on young Seals, which they seize as they are floating on the water; but oft-times, by fixing their talons in an old one, they are overmatched, and drawn down to the bottom, screaming horribly. They feed also on fish, especially the Lumpfish, and a sort of Trout*; on Ptarmigans, Auks, and Eider Ducks. They sit on the top of rocks, attentive to the motion of the diving birds; and, with quick eyes, observe their course by the bubbles which rise to the surface of the water, and catch the fowls as they rise for breath.

The *Greenlanders* use their skins for cloathing, next to their bodies. They eat the flesh, and keep the bill and feet for amulets. They kill them with the bow, or take them in nets, placed in the snow, properly baited; or tempt them by the fat of Seals, which the Eagles eat to an excess; which occasions such a torpidity as to make them an easy prey.

The ERNE, or CINEREOUS Eagle, the *Vultur Albicilla* of LINNÆUS, is the first year wholly dusky, even to the bill, cere, and tail. In the second year the cinereous color commences, tessellated with black; the tail becomes white; and the end of its feathers for some time tipped with black.

It is very easily made tame: will attach itself to its master, distinguish him from others, and receive him with many marks of endearment. When hungry, repeats the sounds, *tack tack*; and when satisfied with food expresses its content, by a repetition of the same note. Is particularly fond of fish: is a sluggish and cowardly species, and will be put to flight even by the Turkeys. — Mr. Oudman.

* *Salmo Carpio*, *Faun. Greenl.* 170, N° 124.

- B. CRYING EAGLE, *Planga et Clanga*, *Aristot. Hist. An.* lib. ix.
Morphnos, Clanga, Anataria, Wil. Orn. 63.—*Raii Syn. Av.* 7. N^o 7.
 Spotted Eagle, *Latbam*, i. 38.
 Le Petit Aigle, *De Buffon*, i. 91.—BR. MUS.

F. With a dusky bill and yellow cere: color of the plumage a ferruginous brown; the coverts of the wings, and scapulars, elegantly varied with oval white spots; on the greater coverts very large: primaries dusky; the ends of the greater white: breast and belly of a deeper color than the rest of the plumage, streaked downwards with dull yellow: tail dark brown, tipped with dirty white: legs feathered to the feet, which are yellow. LENGTH two feet.

Is found in many parts of *Europe*, but not in *Scandinavia*: is frequent in *Russia* and *Siberia*, and extends even to *Kamtchatka*. Is less generous and spirited than other Eagles; and is perpetually making a plaintive noise, from which it was styled by the ancients *Planga* & *Clanga*; and *Anataria*, from its preying on Ducks, which *Pliny** describes with great elegance. The *Arabs* used to train it for the chase; but its quarry was Cranes, and other birds: the more generous Eagle being flown at Antelopes, and various quadrupeds. This species was even itself an object of diversion; and made the game of even so small a Falcon as the Sparrow Hawk: which would pursue it with great eagerness, soar above, then fall on the Eagle, and, fastening with its talons, keep beating it about the head with its wings, till they both fell together to the ground. This Sir *John Chardin* has seen practised about *Tauris*.

PLACE.

* Lib. x. c. 3.

ICELAND FALCON.

- C. ICELAND FALCON, *Gent. Mag.* 1771. p. 297. fig. good.
Falco Islandus Fuscus, *Brunnick*, 2. N° 9.
Le Gerfaut d'Island, *Briffon*, i. 373. tab. xxxi.—*Pl. Enl.* 210.
Falco Gervale, *Lin. Syst.* 130.—*Faun. Suec.* N° 64.—*Latbam*, i. 82, N° 68; and 71,
 N° 50 B. parag. 2d.—*LEV. Mus.*

F. With a strong bill, much hooked, and the upper mandible sharply angulated on the lower edges; cere bluish: head of a very pale rust-color, streaked downwards with dusky lines: neck, breast, and belly, white, marked with cordated spots: thighs white, crossed with short bars of deep brown: back and coverts of wings dusky, spotted and edged with white: the exterior webs of the primaries dusky, mottled with reddish white; the inner barred with white: the feathers of the tail crossed with fourteen or more narrow bars of dusky and white; the dusky bars regularly opposing those of white: the wings, when closed, reach almost to the end of the train: legs strong and yellow. The LENGTH of the wing, from the pinion to the tip, sixteen inches.

This species is an inhabitant of *Iceland*, is the most esteemed of any for the sport of falconry, and is, with the two following, reserved for the kings of *Denmark*; who sends his falconer, with two attendants, annually into the island to purchase them. They are caught by the natives; a certain number of whom in every district are licensed for that purpose. They bring all they take, about *Midsummer*, to *Besfested*, to meet the royal falconer; and each brings ten or twelve, capped, and perched on a cross pole, which they carry on horseback, and rest on the stirrup. The falconer examines the birds, rejects those which are not for his purpose, and gives the seller a written certificate of the qualities of each, which entitles him to receive from the king's receiver-general seventeen rix-dollars for F, or the purest white Falcon; ten for E, or those which
 are

are left white; and seven for this species*. This brings into the island between two and three thousand rixdollars annually †.

They are taken in the following manner:—Two posts are fastened in the ground, not remote from their haunts. To one is tied a Ptarmigan, a Pigeon, a Cock or Hen, fastened to a cord that it may have means of fluttering, and to attract the attention of the Falcon. On the other post is placed a net, distended on a hoop, about six feet in diameter. Through this post is introduced a string, above a hundred yards long, which is fastened to the net, in order to pull it down; and another is fastened to the upper part of the hoop, and goes through the post to which the bait is tied. As soon as the Falcon sees the fowl flutter on the ground, he takes a few circles in the air, to see if there is any danger, then darts on its prey with such violence as to strike off the head, as nicely as if it was done with a razor. He then usually rises again, and takes another circle, to explore the place a second time: after which it makes another stoop; when, at the instant of its descending, the man pulls the dead bird under the net; and, by means of the other cord, covers the Falcon with the net, at the moment it has seized the prey; the person lying concealed behind some stones, or else lies flat on his belly, to elude the sight of the Falcon ‡.

As soon as one is caught, it is taken gently out of the net, for fear of breaking any of the feathers of the wings or tail; and a cap is placed over its eyes. If any of the tail-feathers are injured, the falconers have the art of grafting others §; which sometimes has occasioned a needless multiplication of species.

The *Iceland* Falcons are in the highest esteem. They will last ten or twelve years; whereas those of *Norway*, and other countries,

MANNER OF
TAKING.

* Brunnick, p. 2.

† Olaffen, i. 32.

‡ Horrebow, 59, 60.

§ Brunnick, p. 3.—Horrebow, 58.

seldom

ANTIQUITY OF FALCONRY.

feldom are fit for sport after two or three years use. Yet the *Norwegian* Hawks were in old times in great repute in this kingdom, and even thought bribes worthy of a king. *Geoffry Le Pierre*, chief justiciary, gave two good *Norway* Hawks to King *John*, that *Walter Le Madina* might have leave to export a hundred weight of cheese. *John*, the son of *Ordgar*, gave a *Norway* Hawk to have the king's request to the king of *Norway*, to let him have his brother's chattels; and *Ralf Harvoc* fined to King *Stephen* in two Girsals (*Gyrfalcons*) and two *Norway* Hawks, that he might have the same acquittance that his father had *.

ANTIQUITY OF
FALCONRY.

I cannot fix the precise time of the origin of falconry; the passage in *Aristotle*, and the epigram in *Martial*, do by no means fix it to the periods in which they wrote. The philosopher † informs us, that "there was a district in *Thrace*, in which the boys used to assemble at a certain time of the year, for the sake of bird-catching. That the spot was much frequented by Hawks, which were wont to appear on hearing themselves called: and would drive the little birds into the bushes, where they were caught by the children; and that the Hawks would even sometimes take the birds and fling them to these young sportsmen; who (after finishing their diversion) gratefully bestowed on their assistants part of their prey." This tale may have some truth at the bottom; it being notorious that Larks, and even Partridges, will, by the terror of a Hawk passing over them, lie so still as to suffer themselves to be taken by any passenger. Here seems to have been no training of these *Thracian* Hawks, but a mere casual concurrence of Hawks and small birds, which afforded now and then an amusement to the youth of the country. The thought expressed on the antient gem, of little *Genii* engaged in the chace of Deer, assisted by an Eagle, may have originated from this story.

* *Madox, Antiq. Exch.* 469. 497.

† *Arist. de Mirabil. Auscult.*

The Poet only describes another kind of bird-catching, in the following epigram on the fate of a Hawk :

Prædo fuit volucrum, famulus nunc Aucupis, idem
Decipit, et captas non sibi, moeret, aves *.

By the word *decipit*, it is plain that the Hawk was not trained ; but was merely used as a stale, either to entice small birds under a net, or to the limed twigs : the last is a method still in use in *Italy*. The *Italians* call it *Uccellare con la Civetta* ; for instead of a Hawk, they place a small species of Owl on a pole, in the middle of a field ; and surround it, at various distances, with lime-twigs. The small birds, from their strange propensity to approach rapacious fowls, fly around, perch on the rods, and are taken in great numbers †. A Hawk would serve the purpose full as well. *Pliny* mentions the use of bird-lime ‡ ; and *Longus*, in his elegant romance of *Daphnis* and *Chloe*, employs the latter to catch little birds for his beloved §.

Julius Firmicus, who dedicated his book to *Mavortius Lollianus*, consul A. D. 354, proves that falconry was in use in his days ; for, says he, Falcons taken when the sun is in *Virgo* or *Mercurii*, are far the best. And we further learn that it was in use in *France* in the reign of *Merouée*, who began his reign about the year 576 ; and, being in the abbey of *Tours*, was persuaded to amuse himself with Dogs and Hawks ||.

I cannot find any certainty of Hawks being trained in our island for diversion before the time of King *Ethelbert*, the *Saxon* monarch ; who died in the year 760 ¶. He wrote into *Germany* for a brace of Falcons, which would fly at Cranes and bring them

* Lib. xiv. ep. 216.

† *Olin*, 65.

‡ *Hist. Nat.* lib. xvi. c. 44.

§ *Fr.* ed. octavo, 82.

|| *La Fauconnerie de Ch. d'Arcaffia*, p. 443.

¶ *Saxon Chr.* 60.

ANTIQUITY OF FALCONRY.

to the ground*, as there were very few such in *Kent*. This shews how erroneous the opinion was, of those who place it in the reign of the emperor *Frederic Barbarossa* †, who was drowned in 1189. By the application of *Ethelbert* to *Boniface*, archbishop of *Mentz*, for the brace of Falcons, it is evident, that the diversion was in perfection in *Germany* before the year 752, the time in which that prelate was martyred by the Pagans. It seems to me highly probable, that falconry was invented in *Scythia*, and passed from thence into the northern parts of *Europe*. *Tartary* is even at present celebrated for its fine breed of Falcons; and the sport is in such general esteem, that, according to *Olearius*, *there was no but what had its Eagle or Falcon* ‡. The boundless plains of that country are as finely adapted to the diversion, as the wooded or mountainous nature of most part of *Europe* is ill calculated for that rapid amusement.

The antiquity of falconry in *Tartary* is evinced by the exhibition of the sport on the very antient tombs § found in that country; in which are figured horsemen at full speed, with Hawks on their hands: others again, in the same attitude, discharging their arrows at their game, in the very manner of the antient *Scythians*.

From *Germany*, falconry got footing in *England*; and became so favored a diversion, that even sanguinary laws were enacted for the preservation of rapacious fowls. *Edward III.* made it death for the stealing of a Hawk: and to take its eggs, even in a person's own ground, was punishable with a fine at the king's pleasure, and imprisonment for a year and a day. In the reign of *James I.* the amusement was carried to such an extravagant pitch, that *Sir Thomas Monson* is said to have given a thousand pounds for a cast of Hawks.

* Quoted by Mr. *Whitaker* in *Hist. Manchester*, from *Max. Bibliotheca Patrum*, xiii. p. 85. ep. 40.

† *Spelman's Gloss.*

‡ *Olearius's Travels*, 177.

§ *Strahlenberg*, tab. A. B.

D. GREENLAND.

Dusky. Falco Fuscus, *Faun. Groen.* 56, N° 34. b.Grey Falcon, *Crantz*, i. 78.—*Egede*, 64.

F. With dusky irides: lead-colored cere and feet: brown crown, marked with irregular oblong white spots: forehead whitish: cheeks blackish: hind part of the head and throat white: breast and belly of a yellowish white, striped downwards with dusky streaks: the back dusky, tinged with blue, the ends of the feathers lightest, and sprinkled over with a few white spots, especially towards the rump: wings of the same colors, variegated beneath with white and black: the upper part of the tail dusky, crossed very faintly with paler bars; the under side whitish.

Lesser than the Collared Falcon.

Inhabits all parts of *Greenland*, from the remotest hills to those which impend over the sea. They are even seen on the islands of ice remote from shore. They retire in the breeding-season to the farthest part of the country, and return in autumn with their young. They breed in the same manner as the Cinereous Eagle, but in more distant places; and lay from three to five eggs. The tail of the young is black, with great brown spots on the exterior webs.

They prey on Ptarmigans, Auks, and all the small birds of the country: have frequent disputes with the Raven, but seldom come off victors; for the Raven will, on being attacked, fling itself on its back; and, either by defending itself with its claws, or by calling, with its croaking, numbers of others to its help, oblige the Falcon to retire. The *Greenlanders* use the skin, among many others, for their inner garments; the wings for brushes; the feet for amulets: but seldom eat the flesh, unless compelled by hunger.

It is also a native of *Iceland*.

Size.

Place.

COLLARED, AND KITE FALCON.

- E. COLLARED. *Falco Rusticolus*, *Lin. Syst.* 125.—*Faun. Suec.* N° 56.—*Faun. Groenl.* N° 34.—*Latbam*, i. 56.

F. With a lead-colored bill, tipt with black : head broad and flat, streaked lengthways with black and white ; on the cheeks the white predominates : the throat, under side of the neck, and breast, are of a pure white ; that on the neck almost furrounds it, forming a species of collar : the belly is of the same color, marked with a few dusky cordated spots : the back is waved with ash-color and white ; the tip of each feather white : the coverts of the wings of the same colors, but more obscure : the exterior webs of the primaries dusky : the tail rounded, crossed with twelve or thirteen whitish and dusky bars : the legs yellow. *Size of a Hen.*

PLACE.

Is rarely found in the remotest parts of *Greenland*. Inhabits also *Sweden* ; and extends eastward as far as *Simbirsk*, lat. $54\frac{1}{2}$, in the government of *Casan* *.

- F. KITE, *Br. Zool.* i. N° 53.—*Latbam*, i. 61. N° 43.
Falco Milvus Glada, *Faun. Suec.* N° 57.
Le Milan Royal, *De Buffon*, i. 197.—*Pl. Enl.* 422.—*LEV. Mus.*

F. With yellow bill and cere : white head, streaked with black : body ferruginous, with a few dusky spots : tail much forked and ferruginous.

SIZE.

Weight forty-four ounces. Length twenty-seven inches : extent five feet one.

PLACE.

Inhabits the north of *Europe*, as high as *Jarlberg*, in the very south of *Norway* † ; but does not extend farther. This species, the

* *Extraits*, i. 315.

† *Hammer*, *Faun. Norway*.

Sea Eagle, Lammer, Buzzard, and Kestrel, quit *Sweden*, in flocks, at approach of winter, and return in spring *. Of these, the *Buzzard* and *Kestrel* winter at *Woronesch*, in *Russia*, in *lat.* 52 †; and, together with the *Lammer* and *Kite*, about *Astrakan* ‡, in *lat.* 46. 30; but the far greater part of the *Kites* are supposed to retire into *Egypt*, being seen in *September* passing by *Constantinople* §, in their way from the north; and again in *April* returning to *Europe* ||, to shun the great heats of the east. They are observed in vast numbers about *Cairo*, where they are extremely tame and feed even on dates, I suppose for want of other food ¶. They also breed there; so that, contrary to the nature of other rapacious birds, they increase and multiply twice in the year; once in the mild winters of *Egypt*, and a second time in the summers of the north. It makes its appearance in *Greece* in the spring; and in the early ages, says *Aristophanes* **, “it governed that country: and men fell on their knees when they were first “ blessed with the sight of it, because it pronounced the flight of “ winter, and told them to begin to shear their vernal fleeces. The “ *CRANE* likewise, by its autumnal departure, warns the mariner to “ hang up his rudder, and take his rest, and every prudent man to “ provide their winter garments: and the *SWALLOW* again informed “ them when they were to put on those of summer. Thus, adds the “ chorus of birds, are we to you as *AMMON, DODONA, APOLLO* :” meaning, in those early days, that man consulted only these natural calendars, and needed no other than what they took from the flight of birds ††, or the flowering of plants.

They inhabit *England* in all seasons. I have seen their young taken, the last week in *May*, or first in *June*, in the great woods be-

* *Amœn. Acad.* iv. † *Extracts*, i. 100. ‡ *Vol.* ii. 142. § *Forsskahl, Descr. Arab.* 7. || *Wil. Orn.* 75. ¶ *Belon Obs.* xxxvi. p. 107. b. ** *Aves.*

†† See this subject most ingeniously handled in *Mr. STILLINGFLEET's Essays*, in the *Calendar of Flora*.

HONEY BUZZARD, AND LANNER.

longing to Sir *Joseph Banks*, in *Lincolnshire*; and have often observed them in various places in the depth of winter.

- G. HONEY BUZZARD, *Br. Zool.* i. N° 56.—*Latham*, i. 52. N° 33.
Falco Apivorus Slaghok, *Faun. Suec.* N° 65.—*LEV. Mus.*

F. With an ash-colored head; dark brown above; below white, spotted or barred with rusty brown: tail brown, barred with two dusky bars, remote from each other: legs strong and yellow: bill and cere black. LENGTH twenty-three inches. WEIGHT thirty ounces.

PLACE.

Inhabits as far north as the district of *Sondmor*, in *Norway* *. Is found in plenty in the open parts of *Russia* and *Siberia*, near woods; and preys much upon Lizards.

- H. LANNER, *Br. Zool.* i. N° 51.—*Latham*, i. 86.
Falco Lannarius, *Faun. Suec.* N° 62.—*De Buffon*, i. 243.

F. With a white line over each eye: cere and legs bluish: breast white, tinged with yellow, and marked with brown spots: primaries and tail dusky; the first marked with oval rust-colored spots on the inner webs; the last, on both.

PLACE.

Inhabits *Iceland*, the *Feroe* isles, and *Sweden*; the *Tartarian* deserts and the *Baraba*. Breeds on very low trees. None in the north or east of *Siberia*. Much esteemed for falconry.

* *Strom.* 235.

I. MOOR BUZZARD, *Br. Zool.* N° 57.—*Latham*, i. 53.

Falco Æruginosus, *Faun. Suec.* N° 66.

Hons-tjuf, Le Bufard, *De Buffon*, i. 218. pl. x.—*Pl. Enl.* 424.

F. Entirely of a chocolate brown, tinged with rust: on the hind part of the head a light clay-colored spot: slender long yellow legs: cere black.

Weight twenty ounces. Length twenty-one inches.

Found in the *Transbaltic* countries, as far north as *Sondmor* *. Common in the south of *Russia*: not in *Siberia*. It continues the whole year in *Sweden*.

SIZE.

PLACE.

K. KESTRIL, *Br. Zool.* i. N° 60.—*Latham*, i. 94.

Falco Tinnunculus, *Kirko-Falk*, *Faun. Suec.* N° 61.—*Muller*, N° 65.

La Gresserelle, *De Buffon*, i. 280. pl. xviii.—*Pl. Enl.* 401, 471.

Male. F. With the crown and tail of a fine light grey, the last marked with a black bar near the end: back and wings of a purplish red, spotted with black.—*Female*. Head reddish; crown streaked with black: back, tail, and coverts of wings, dull rust-color, barred with black: legs yellow. WEIGHT of *Male* six ounces and a half: of *Female* eleven.

Frequent in the deserts of *Tartary* and *Siberia*, in the open countries, where small trees are found for it to breed in. Migrates into *Sweden*, at the time in which the White Wagtail returns, and the Saffron, Snowdrop, and bulbous Violet, blossom. Each of these birds quit the country about the same day, in *September* †. Not found farther north?

PLACE.

* *Strom*, 235.

† *Calendar of Flora*, and *Migr. Av.* in *Aman. Acad.* v. 397. 382.—Is found as far south as the *Holy Land*.—*Hasselquist Itin.* 291.

- L. SPARROW HAWK, *Br. Zool.* i. N° 62.—*Latbam*, i. 99.
Sparfhok, Faun. Suec. N° 68.—*Muller*, N° 71.—*Strom.* 235.
L'Epervier, De Buffon, i. 225. pl. xi.—*Pl. Enl.* 412, 467.

F. With head, back, and coverts of wings and tail, (in some) of a deep bluish grey; in others, of a deep brown, edged with rust-color: breast and belly of a whitish yellow, with waved bars of deep brown or dull orange: tail cinereous, with five broad black bars; the tips white.

Weight of the male five ounces: female nine.

PLACE.

Found as high as *Sondmor*, and in the *Feroe* islands, in the south of *Russia*; but none in *Siberia*.

- M. HOBBY, *Br. Zool.* i. N° 61.—*Latbam*, i. 103.
Falco Subluteo, Faun. Suec. N° 59.

F. With crown, back, and coverts of a bluish black: from the crown a black stroke points down the cheeks, which are white: breast white, with oblong black spots: thighs and vent pale orange: inner webs of primaries marked with oval reddish spots: two middle feathers of the tail plain dove-color; the inner webs of the others marked like the primaries: legs yellow. WEIGHT of the male seven ounces.

PLACE.

Schonen, the most southern province of *Sweden**, and, I believe, does not extend farther north. This species winters about *Woronezh* and *Astrakan*†; and frequents the same places in *Siberia* with the KESTRIL.

* *Faun. Suec.*

† *Extraits*, ii. 142.

III. OWL. *Gen. Birds* III.

* E A R E D O W L S.

Great Horned Owl, *Edw.* 60.—*Latham*, i. 119.Great Grey Owl, *Jesselyn*, 96.—*Lawson*, 145.Jacurutu, *Margrave*, 199.Stria Bubo Uf, *Faun. Suec.* N° 69.

114. EAGLE.

O. With a dusky bill: yellow irides: horns shorter than the *European Eagle Owl*; those, with the head, black, marked with tawny: circle round the eyes cinereous, edged with black: on the throat a large cruciform mark of a pure white, reaching to the beginning of the breast: upper part of the breast dusky and tawny; the lower part thickly barred with black ash-color, mixed with yellow: coverts of wings, scapulars, and back, elegantly painted with zigzag lines, cinereous, black, and orange; the scapulars also marked with a few great white spots: primaries broadly barred with black and ferruginous: tail of a deep brown, crossed with brown dusky bars, and marked with numerous transverse cinereous lines: legs and feet covered with soft light brown feathers to the very claws, which are very strong and hooked.

This species is inferior in size to the EAGLE OWL, *Br. Zool.* i. N° 64; but seems only a variety.

It is common to *South* and *North America*, as high as *Hudson's Bay*. Makes, during night, a most hideous noise in the woods,

not

SIZE.

PLACE.

LONG-EARED OWL.

not unlike the hollowing of a man; so that passengers, beguiled by it, often lose their way.

The savages have their birds of ill omen, as well as the *Romans*. They have a most superstitious terror of the Owl; which they carry so far as to be highly displeased at any one who mimics its hooting*.

This species is common in *Kamtschatka*, and even extends to the *Arctic* regions; in the first of which it very often inclines to white. It is found as low as *Astrakan*.

115. LONG-
EARED.

Br. Zool. i. N° 65.—Moyen Duc ou Hibou, *Hist. d'Ois.* i. 343.
Strix Otus, *Faun. Succ.* N° 71.—*Latbam*, i. 121.

O. With very long ears, of six feathers each, yellow and black: irides yellow: back and coverts of wings deep brown, grey, and yellowish rust-color: primaries barred with dusky and ferruginous: breast and belly pale yellow, with slender brown strokes, pointing downwards: tail barred with cinereous and dusky; the bars of the middle feathers bound above and below with white: feet feathered to the claws. LENGTH fourteen inches; EXTENT of the *English* specimens three feet four †. Weight ten ounces.

PLACE.

Observed by Mr. *Hutchins* about *Severn* settlement in *Hudson's Bay*, where it lives in the woods, far from the sea: at night sallies in search of prey. Approaches the tents of the inhabitants, and is very clamorous. Builds its nest in trees, and lays four white eggs in *April*. Never migrates.

* *Calsen's Six Indian Nations*, i. 17.

† If no mistake is made in Mr. *Hutchins's* MS. the extent is less by far than that of the *English* kind.

Inhabits

SHORT-EARED OWL.

265

Inhabits *Sweden*, and the northern and southern parts of the *Russian* dominions, and the eastern parts of *Siberia*. Is found as far south as *Astrakan*, and even in the hot climate of *Egypt* *.

Short-eared Owl, *Br. Zool.* i. N^o 66.—*Phil. Transf.* lxi. 384.—*Latb.* i. 124.
Moyen Duc, ou Hibou, *Pl. Enl.* 29.—*Bl. Mus.*—*Lev. Mus.*

116. SHORT-
EARED.

O. With a lesser head in proportion than the former: bill dusky: irides yellow: head, back, and coverts of the wings, pale brown, edged with dull yellow: breast and belly yellowish white, marked with a few dusky streaks pointing downwards: thighs, legs, and toes, warmly covered with plain yellow feathers: tail dusky brown, marked on each side of the middle feathers with a large yellow circle, with a brown spot in the middle. In the others, the feathers are yellowish, obliquely barred with black. The horns, or ears, consist of only a single feather, which it can raise or depress at pleasure. The wings reach beyond the end of the tail. **LENGTH** fourteen inches. **Weight** fourteen ounces.

SIZE.

Found in plenty in the woods near *Chateau Bay*, on the *Labrador* coast. It is also an inhabitant of the *Falkland Islands*; so probably is common to *North* and *South America*. In *Hudson's Bay* it is called the *Moose Hawk*. It never flies, like other Owls, in search of prey; but sits quiet on a stump of a tree, watching, like a Cat, the appearance of Mice. It breeds near the coast; makes its nest with dry grass upon the ground; and migrates southwards in autumn. Father *Feuillée* speaks of an Owl he found in *Peru* that has some resemblance to this, particularly in the Hawk-like shape of the bill. He says

PLACE.

• *Hæfeli*, *Itin.* 233.

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it

SHORT-EARED OWL.

it burrows under ground to a great depth, like a Rabbet; for which reason he names it *Uula Cunicularia**. It is very common in the northern and woody parts of *Siberia*. Comes boldly to the night fires, and assaults men, when it is often killed with sticks.

In *Europe* it is found in *Great Britain*, and reaches to the *Orkney* isles. Does not perch, but sits on the ground, on which it lays its eggs amidst the heath. Appears and disappears in *Lincolnshire* with the Woodcock. Perhaps migrates to *Sweden* or *Norway*, where it is also found, and even as high as *Iceland*†. Flies and preys by day, in dark and cloudy weather. Friendly to the farmer, by being an excellent mouser. Does not fly far; but if disturbed, soon alights, and sits looking about; at which times its horns are very conspicuous. This circumstance hitherto unattended to; so that it has been ranked among the Earless Owls.

The SHORT-EARED OWL appears to me to be *La Chouette* of the *Comte de Buffon*, and his *Moyen Duc*, ou *Hibou*, tab. 29. of the *Pl. Enlum.* In p. 102. of my indexes to his *Ornithologie*, and the *Pl. Enl.* I have endeavoured to clear up the confusion, which the illustrious writer has introduced on the subject.

* *Voy. Peru*, ii. 562.

† See *Strix Fumerea*, *Faun. Suec.* N° 75.—*Pontop. Atlas Danica*, tab. 25.—*Olaassen's Iceland*, ii. tab. 46.

RED, AND MOTTLED OWL.

267

Little Owl, *Catsky*, i. 7.—*Latham*, i. 123.
Strix Aho, *Lin. Syll.* 132.—*Bl. Mus.*—*Lev. Mus.*

117. RED.

With yellow irides: horns, head, back, and wings, of a pleasant tawny red, streaked with black: the scapulars marked with large white spots: primaries barred with black, red, and white: breast pale tawny, marked with oblong black spots: tail red, barred with dusky: feet covered with feathers to the claws. LENGTH ten inches and a half.

Inhabits *New York*, and as low as the *Carolinas*. Lives in the woods near the coast.

PLACE.

Latham, i. 126.—*Bl. Mus.*—*Lev. Mus.*

118. MOTTLED.

O. With the face white, spotted with brown: head, wings, and upper part of the body, mottled with ash-color and pale red: the scapulars marked with great white spots; as are the coverts of the wings: the primaries with black and pale ferruginous: breast and belly whitish, varied with dusky ragged stripes, pointing downwards: toes feathered to the claws. LENGTH eleven inches.

Inhabits the province of *New York*. Breeds in *May*, and continues in the country the whole year.

PLACE.



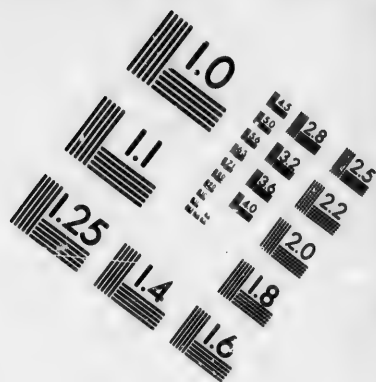
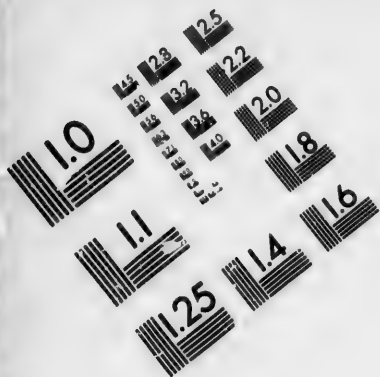
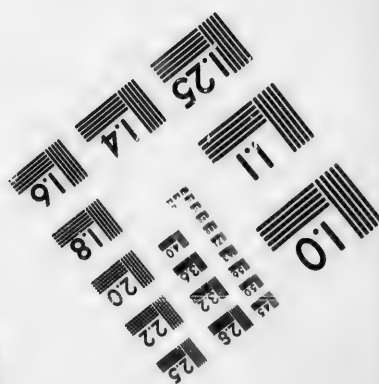
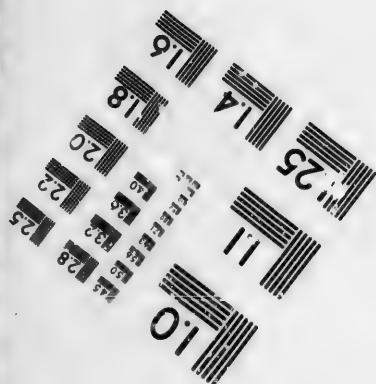
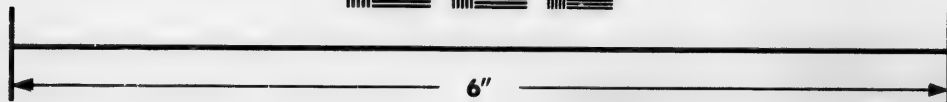
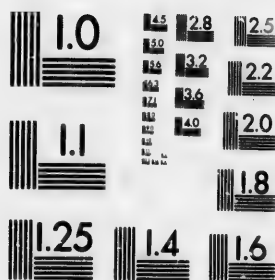


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** WITHOUT EARS.

119. WAPACUTHU.

O. With glossy black bill, and claws much incurvated: base of the bill beset with strong bristles: irides bright yellow: space between the eyes, cheeks, and throat, white: the ends of the feathers on the head black: scapulars, and all the coverts of the wings, white, elegantly barred with dusky reddish marks, pointing downwards: primaries, secondaries, and tail feathers, irregularly spotted and barred with pale red and black: back and coverts of the tail white, mixed with a few dusky spots: breast and belly dirty white, crossed with innumerable reddish lines: vent white: legs feathered to the toes, which are covered with hairs. WEIGHT five pounds: length two feet: extent four.

PLACE.

Inhabits the woods about *Hudson's Bay*: makes its nest on the moss, on the dry ground. The young are hatched in *May*, and fly in *June*; and are white for a long time after. Feeds on Mice and small birds. Called by the *Indians*, *Wapacuthu*, or the Spotted Owl. The *Europeans* settled in the bay, reckon it a very delicate food.

120. SOOTY.

Cinereous Owl, *Latham*, i. 134, N^o 19.—BR. MUS.

O. With a whitish bill: bright yellow irides: circlets consist of elegant alternate lines of black and pale ash-color: head, hind part of the neck, and coverts of wings, sooty, marked with narrow bars of dirty white: primaries deep brown, with broad bars,

bars, composed of lesser of dusky and pale cinereous: tail most irregularly marked with oblique strokes of brown and dirty white: the breast and belly whitish, greatly covered with large oblong blotches of dusky brown: as a singular mark, from the chin to the vent is a space, about an inch in breadth, entirely naked: legs feathered to the feet. WEIGHS three pounds: length two feet: extent four.

Inhabits *Hudson's Bay* the whole year. Flies in pairs. Feeds on Mice and Hares. Flies very low; yet seizes its prey with such force, that, in winter, it will sink into the snow a foot deep; and, with great ease, will fly away with the AMERICAN HARE, N° 38, alive in its talons. It makes its nest in a pine-tree, in the middle of *May*, with a few sticks lined with feathers; and lays two eggs, spotted with a darkish color. The young take wing in the end of *July*.

PLACE.

Great White Owl, *Edw.* 61.—*Ellis's Voy.* 40.—*Du Pratz*, ii. 91.—*Clayton's Virginia*.—*Pb. Transf.* iii. 589.

Great Speckled Owl, *Egede*, *Greenland*, 64.

Strix Nyctea, *Harfang*, *Faun. Suec.* N° 76.—*Buffon*, i. 387.—*Latham*, i. 132, N° 17.—*BL. MUS.*—*LEV. MUS.*

121. SNOWY.

O. With a head less in proportion than other Owls: irides yellow: whole plumage of a snowy whiteness, sometimes pure, oftener marked with dusky spots: the legs and feet covered warmly to the very claws with long snowy feathers of the most delicate and elegant texture: the claws are of a fine contrasting blackness, very large and very crooked. Its length two feet; but it varies greatly in weight, from three pounds to one and a half.

SIZE.

It inhabits the coldest parts of *America*, even as high as the remote mountains in the icy centre of *Greenland*; from which, in intense

PLACE.

S N O W Y O W L.

tense cold, it migrates to the shores. It adds horror even to that country, by its hideous cries, resembling those of a man in deep distress.

It is rare in the temperate parts of *America*, and seldom strays as low as *Pennsylvania* or *Louisiana*, yet has been frequently seen by *Doctor Garden*, in the sultry climate of *South Carolina*, among the groves of *Palmetto* trees, or the *Chamerops humilis**, which line the shores from the Capes of *Florida* quite to *Charlestown*. There they lurk during day, and sally out in quest of prey during night. Is very common in *Hudson's Bay*, in *Norway*, and *Lapland*. It fears not the rigor of the season, but bears the cold of the northern regions the whole year. It flies by day, and is scarcely to be distinguished from the snow: it flies pretty swiftly, and falls perpendicularly on its prey. Feeds on the White Grouse, and probably on the Hares; for to the last circumstance it owes its *Swedish* name, *Harfang*. It preys also on Mice, and Carrion; and in *Hudson's Bay* is almost domestic, harbouring in places near the tents of the *Indians*.

Is scarce in *Russia*; grows more common on the *Uralian* mountains, and all over the north and east of *Siberia*, and in its *Asiatic* empire, even in the hot latitude of *Astrakan*†; are very numerous in *Kamtschatka*.

* *Lin. Sp. Pl.* 11. 1657.—See also *Bartram's Journal* 1765, p. 13.

† *Extraits*, i. 91. ii. 142.

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117 Red Owl. 118 Mottled. 120 Barred. *J. Magell Sculp.*

Latham, i. 133, N° 18.—Bl. Mus.—Lev. Mus.

122. BARRED.

O. With a pale yellow bill, beset with strong bristles: irides yellow: circlets whitish, barred with dusky lines: head, back, coverts of the wings, and the breast, barred with dark brown, and white tinged with yellow; the primaries with black and white: the belly white, marked downwards with long stripes of deep brown: tail barred with broad bands of black, and narrower of white: wings reach only half the length of the tail: feet feathered to the claws.

A large species, two feet long; the extent four. Weight three pounds.

Inhabits *Hudson's Bay*, and *New York*. Preys on Hares, Grouse, Mice, &c.

SIZE.

PLACE.

Little Hawk Owl, *Edw. 62.—Latham, i. 142, N° 29; 143, N° 30; 147, N° 36; 148, N° 37.—Phil. Transf. lxi. 385.*
Le Chat-huant de Canada, *Briffon, i. 518.—De Buffon, i. 391.*
Chouette a longue queue de Sibirie, *Pl. Enl. 463.—Lev. Mus.*

123. HAWK.

O. With yellow irides: head finely spotted with dusky and pure white: back brown, with a few large white spots: primaries of a deep brown, regularly spotted with white on each web: upper part of the breast white; lower part and belly barred with brown: tail very long, and cuneiform, marked with broad bars of brown, and narrow of white: feet protected with feathers to the claws.

LENGTH seventeen inches. WEIGHT twelve ounces. Never hatches above two young at a time; which, for some months after flight, retain a rusty brown plumage.

This

PLACE.

This species is common to *North America*, *Denmark*, and *Sweden*. The Savages who come down to *Hudson's Bay*, call it *Cabetitutch*. It flies high, like a Hawk, and preys by day on the White Grouse. Like the Short-eared Owl, will hover over the nocturnal fires. Is a bold bird; will attend the fowler, and often steal the game he has shot, before he can pick it up. Was seen by the navigators near *Sandwich* sound, in lat. 61 north.

This bird is very frequent in all *Siberia*, and on the west side of the *Uralian* chain, as far as *Caspian* and the *Volga*: not in *Russia*.

124. WHITE.

Tuidara, *Margrave*, 205.

Barn Owl, *Clayton's Virginia*.—*Phil. Transf.* iii. 589.

White Owl, *Br. Zool.* i. N° 67.—*Latham*, i. 138.

Strix Flammea, *Faun. Suec.* N° 73.

L'Effraie, ou L'Effraie, *De Buffon*, i. 366. pl. xxvi.—*Pl. Enl.* 440.—*Leve Mus.*—*BL. Mus.*

O. With a white bill: dusky irides: head, back, and coverts of wings, of a pale beautiful yellow, with two grey and two white spots placed alternately on each side of the shafts: breast and belly wholly white: interior sides of the feathers of the tail white; exterior marked with obscure dusky bars: legs feathered: feet covered with short hairs. LENGTH fourteen inches. WEIGHT eleven ounces.

PLACE.

This bird is common to *North* and *South America*, and to *Europe*. Was found by the navigators near *Sandwich* sound, lat. 61 north. Is rare in *Sweden*, and, I believe, not found farther north. Inhabits *Tartary*. The *Mongol* and *Kalmuc Tartars* almost pay it divine honors; because they attribute to this species the preservation of the founder of their empire, *Cingis Khan*. That prince with his small army

army happened to be surprized and put to flight by his enemies, and forced to conceal himself in a little coppice: an Owl settled on the bush under which he was hid, and induced his pursuers not to search there, as they thought it impossible any man could be concealed in a place where that bird would perch. From thenceforth they held it to be sacred, and every one wore a plume of the feathers of this species on his head. To this day the *Kalmucs* continue the custom, on all great festivals; and some tribes have an idol in form of an Owl, to which they fasten the real legs of one *.

Brown Owl, *Br. Zool.* i. N° 69.—*Latbam*, i. 140.—*De Buffon*, i. 372.—*Pl. Enl.* 438.

125. BROWN.

Strix Ulula, *Faun. Suec.* N° 78.—*Bl. Mus.*—*Lev. Mus.*

O. With dark hazel irides: head, wings, and back, of a deep brown spotted with black: coverts of the wings and scapulars varied with white spots: breast of a pale ash-color, marked with dusky jagged strokes pointing downwards: feet feathered to the claws. LENGTH about fourteen inches. WEIGHT nineteen ounces.

Inhabits *Newfoundland*: rare in *Russia*: unknown in *Siberia*: found in *Sweden* and *Norway* †.

PLACE.

* *Extrañs.*

† *Brunnich*, N° 19.

126. LITTLE.

Little Owl, *Br. Zool.* i. N° 70.—*De Buffon*, i. 377.

Strix Passerina, *Faun. Suec.* N° 79.—*Latham*, i. 149, N° 38, N° 39; 150, N° 40.
—*Bl. Mus.*—*Lev. Mus.*

O. With pale yellow irides: bill whitish brown: head light brown speckled with white: back, and coverts of the wings, and scapulars, of the same color, marked in parts with white spots: the breast whitish, varied with rust-color: tail barred with white, and marked regularly on each web with circular white spots: feet feathered to the claws. It varies in length, from eight to seven inches. The smallest I have seen is from *Nova Scotia*; which has white circlets about the eyes, and fewer white spots on its plumage.

PLACE.

Inhabits from *Hudson's Bay* to *New York*. Called by the natives of the first, *Shipmospish*. Lives in all seasons among the pines: builds its nest half way up the tree: lays two eggs. Are most solitary birds. Keep close in their retreat the whole day; but are most active mousers during night. Frequent in *Russia*; less so in *Siberia*.

The LITTLE OWL appears in *Sweden* with the first rays of the sun: its voice is a most acute whistle, by the imitation of which, small birds are readily collected together.

• E A R E D.



* E A R E D.

- A. SCANDINAVIAN EARED OWL, *Strix Scandiaca*, *Faun. Suec.* N° 70.—*Latham* i. 120.

O. With the plumage entirely white, sprinkled with black spots.
Size of a Turkey: in all respects like the Snowy Owl, except the ears.

SIZE.

Inhabits the *Lapland alps*. Mentioned by *Linnaeus*; who seems to take his description from a painting of *Rudbeck's*; but its existence is confirmed by Mr. *Tønning* of *Drontbeim* *.

PLACE.

** E A R L E S S.

- B. TAWNY OWL, *Br. Zool.* i. N° 68.—*Latham*, i. 139.
Strix Stridula, *Skrik Uggla*, *Faun. Suec.* N° 77.—*Pl. Enl.* 437.—*LEV. MUS.*

O. With a plain head: dusky irides: plumage of the head, and the whole upper part of the body, tawny, spotted and powdered with dusky spots: breast and belly yellowish, mixed with white, marked downward with dusky streaks: tail blotched, barred, and spotted with pale rust-color and black: toes feathered to the claws.
WEIGHT nineteen ounces.

* *Rariora Norvegiæ*, in *Aman. Acad.* vii. 479.

N n 2

Inhabits

PLACE.

Inhabits *Europe*, as far as *Sweden*. Frequent in the south of *Russia*, and deserts of *Tartary*; and breeds in the nests of Rooks. None in *Siberia*: a suspicion that it is found in *Hudson's Bay*?

C. SWEDISH.

THE *Strix Aluco* of LINNÆUS; *La Hulote, de Buffon*, i. 358; *Pl. Enl.* 441, is a bird of *Sweden*. I never met with it, therefore borrow the description from Mr. *Latham's Ornithology*.

The head is large: irides dusky: circle of feathers round the eyes greyish: upper part of the body deep iron grey, spotted with black and white: breast and belly white, striped down with ragged black strokes: legs and feet covered with feathers, white, with numerous black specks: tail barred with reddish ash and black: the first feather of the wings exceeds the rest by two or three inches: the wings reach beyond the end of the tail.

This species lays, in *April*, from three to five eggs, of a snowy whiteness: the young are blind to the tenth day, and are covered with filthy red warts. The female parent feeds them with mice. They fly towards the end of *July*. The note of the young is like the noise of granshing one's teeth. The old fly in the most quiet manner, and make no sort of noise: they feed on small birds, but vetches have been found in their stomach. In the summer they live in the woods; towards winter return to the neighborhood of houses. It refuses to eat in captivity, and loses its life with its liberty. If one of its young is taken away, it removes the rest to another place.

D. SPOTTED.

D. SPOTTED.

DOCTOR *Tengmalm*, an able ornithologist, resident near *Stockholm*, lately discovered a new species of Owl, of the size of a Blackbird. The bill dusky, tipped with white: from its corners, to each eye, is a line of black: the irides yellow: the circle of feathers round the eyes is white, mixed with dusky: head grey, striped with white, and surrounded with a dusky circle spotted with white and dusky: primaries dusky, barred with white: breast and belly white, varied irregularly with dusky marks: tail above, of a dusky grey, striped with white: toes feathered to the claws; grey, with pea-shaped spots of white.

O R D E R

O R D E R I I . P I E S .

I V . S H R I K E . *Gen. Birds IV.*

127. GREAT.

Great Shrike, *Br. Zool.* i. N° 71.*Lanius Excubitor*, Warfogel, *Faun. Suec.* N° 80.—*Latham.* i. 160.White Whisky John, *Phil. Transf.* lxii. 386.La Pie-grieche Grise, *De Buffon*, i. 296. pl. xx.—*Pl. Enl.* 445.—*Lev. Mus.*

S. With a black bill and legs: cinereous crown, hind part of the neck, and back: cheeks white, crossed from the bill with a bar of black: under side, from chin to tail, white, marked with semicircular lines of a pale brown: lesser coverts black; those on the joints of the wings ash-color: primaries black, marked with a single band of black; secondaries tipped with white: the tail cuneiform; the two middle feathers black, the tips of the next on each side white; on the rest the white prevails, till the exterior, when the black almost entirely vanishes: beyond each eye of the female is a brown bar.

PLACE.

Inhabits *North America*, from *Hudson's Bay* to *Louisiana*. In *Hudson's Bay*, lives in the woods remote from shores, and is the first bird there which brings out its young in the spring. Makes its nest with dry grass or bents, and lines it thickly with feathers: lays seven eggs, of a pale blue color, blotched with brown.

Is frequent in *Russia*, but does not extend to *Siberia*; yet one was taken by our navigators within *Bering's* straits, in *lat.* 66, on the *Asiatic* side of the Frozen Sea. Has the same manner of transfixing and tearing its prey as the *English* kind.

S. With the bill, legs, crown, and sides of the head, back, and coverts of wings, black: primaries black, marked with a small spot of white, and another on the ridge of the wing: throat, cheeks, and vent, pure white: breast and belly tinged with ash-color: tail long; middle feathers black; the rest marked at their ends with white, which increases to the exterior; in which the black almost vanishes. Rather inferior in size to the last.

Inhabits *North America*. Seems to be *La Pie Grièfche de la Louisiane*, *Briffon*, ii. 162; *Latham*, i. 162.

128. BLACK-CROWNED.

PLACE.

Lanius Canadensis, *Lin. Syf.* 134.—*De Buffon*, i. 316.—*Pl. Enl.* 479. fig. 2.—*Latham*, i. 182.

La Pie Grièfche de Canada, *Briffon*, ii. 171.—*LEV. MUS.*

129. CRESTED.

S. With black bill and legs: head adorned with a reddish crest: cheeks dusky, spotted with white: hind part of neck and back brown, inclining to red: throat and breast of a yellowish red: belly and vent of a fine ash-color: coverts of the wings black, edged with white; primaries with white on their exterior sides: tail black, bordered on each side, and tip with white. LENGTH six inches and a half: EXTENT about eleven.

Inhabits *Canada*.

PLACE.

S. With the bill slightly incurvated at the end, black, except the upper half of the lower mandible: crown, lower part of the upper side of the neck, and the back, black: over each eye is a white line, extending to the very nape; beneath that one of black: from chin to vent is wholly white: a narrow white circle quite encompasses

130. NATKA.

RED-BACKED SHRIKE.

compasses the neck: lesser coverts of the wings black; greater white, more or less dashed down the shafts with black: primaries dusky, fringed with yellowish brown; secondaries black, edged and tipped with white: tail black, a little rounded; the four outermost feathers tipped with white: rump cinereous, the edges of the feathers grey: legs black. LENGTH seven inches one-fourth.

PLACE.

Brought from *Natka* found in *North America*. Communicated to me by Mr. *Latbam*, who describes it (vol. i. p. 169) under the name of the *Northern*.

131. RED-BACKED.

Br. Zool. i. N° 72.—*Latbam*, i. 167.

Lanius Collurio, *Faun. Suec.* N° 81.

Pie-grieche de la Louisiane, *De Buffon*, i. 307.—*Pl. Enl.* 397.—*Lev. Mus.*

S. With grey crown and rump: ferruginous back and coverts of wings: black line across the eyes: breast and belly roseate: tail black; exterior feathers edged with white: head and upper part of the FEMALE dirty rust-color; line over the eyes the same color: breast and belly dirty white, marked with dusky semicircular lines. LENGTH seven inches and a half.

PLACE.

Inhabits *Russia*; not *Siberia*. Is found in *Sweden* and *Christiania*. The Count *De Buffon* says, he received one from *Louisiana*. I imagine, that, as the *Norwegians* give the Great Shrike and this a name, that they may be found in their country. The first they call *Klavert*, the last *Hanvark*. Mr. *Ekmark* has observed both of them, only during summer, in *East Gothland*; but is not certain whether they winter. Each species appears in *Italy* in the spring; retires in autumn.

The RED-BACKED SHRIKE returns to *Sweden* the latter end of *April*: makes its nest in low bushes, in form of a cup, near a quarter of a yard in diameter, of wool, soft dry grass, &c. with amazing art.

The

The young are long before they fly: the task of feeding the young rests chiefly on the female; and principally the food consists of insects of the *hymenoptera* order. Their food is not confined to those, for Mr. Oedman has seen about the nests the *exuvia* of thousands of hornets. The female defends its nest stoutly, yet at other times is very timid: the male with great affection feeds its mate, when the latter is on the duty of incubation; and during that time is rarely seen at home. When the female has quitted the nest, the male undertakes the care of the young; sitting for their protection in the top of some neighboring tree: the female sits in fearful silence: its mate elevates its voice. This species feeds chiefly on insects, seldom on small birds.—Mr. Oedman.



- A. GREY, *Lanius Nengeta*, *Lin. Syst.* 135.—*Latb.* i. 183,
Grey Pye of *Brasil*, *Edw.* 318.

S. With the crown, hind part of the neck, back, and coverts of the wings, deep cinereous: a black line passes from the bill through the eyes to the hind part of the head: greater coverts and secondaries black, tip with dirty white; primaries black; breast and belly light ash-color: tail black; ends of the outmost feathers white. Much larger than N° 127, the common Great Shrike; and differs specifically.

LESSER GREY SHRIKE.

PLACE.

Inhabits *Russia*, but is more frequent in *Siberia*; where it lives in the forests the whole winter. Taken and tamed by the fowlers; and kept by the *Russians* for the diversion it affords in the manner of killing its prey. They stick a rod with a sharp point into the wall of a room, on which the Shrike perches. They turn loose a small bird, which the former instantly seizes by the throat, strangles, and then spits it on the point of the stick, drawing it on with its claws and bill. Thus it serves as many as are turned to it, and afterwards eats them, thus suspended, at its leisure*. The *Germans* style it *Wurchangel*, or the *Suffocating-angel*. The old *English*, *Wariangel*, which signifies a bird of some very mischievous qualities; as is evident from *Claucer*.

'This Sompnour, which that was as ful of jangles,
As ful of venime ben thife *Wariangles* †.

B. LESSER GREY, Pie Grièche d'Italie, *De Buffon*, i. 298.—*Pl. Enl.* 32.

S. With the forehead black: a black line crosses the eyes, like as in the former: head, hind part and sides of the neck, back, and coverts of wings, cinereous, palest on the rump: ridge of the wing white: primaries black, with a white spot near the base; secondaries black, tipped with white: throat white: breast and belly tinged with rose-color: tail marked like the preceding.

PLACE.

Inhabits *Russia*, but not *Siberia*. Found in *Italy* and *Spain*.

* EDWARDS, *Gl.* p. 233.

† The Freres tale.—*Ful of venime*, because it was believed, that the thorn on which it stuck its prey was venomous.

V. PARROT.

V. PARROT. *Gen. Birds V.*

Parrokeeto, *Lawson*, 142.—*Latham*, i. 227.—*LEV. MUS.*
 Parrot of Carolina, *Catesby*, i. 11.—*Du Pratz*, ii. 88.
Psittacus Carolinensis, *Lin. Syst.* 141.—*Briffon*, iv. 350.
 La Perruche a tete jaune, *De Buffon*, vi. 274.
 Le Papegai a tete aurore, *De Buffon*, vi. 247.

132. CAROLINA.

P With the forehead, ridge of the wings, and feathers round the knees, orange: head and neck yellow: back, body, and coverts of wings and tail, green: primaries dusky, mixed with blue and green; the upper exterior sides edged with yellow: tail very long and cuneiform: legs white. **LENGTH** thirteen inches. **WEIGHT** three ounces and a half.

Inhabits the southern parts of *North America*, but never appears higher than *Virginia*. It is in general a migratory bird, even in *Carolina*; arriving at the season when mulberries are ripe, which they are very fond of, and which are the earliest fruits of the country, except strawberries. They infest, in autumn, the apple-orchards in vast flocks, and make great havock by splitting the fruit for the sake of the kernels only, being very greedy of them, and the seeds of cypress, and other trees. They devour too the buds of the birch.

PLACE.

Few of these tender birds continue in *Carolina* during the whole year. They breed in hollow trees, in low swampy grounds. When taken, they easily grow tame, but do not speak. Their intestines are said to be a speedy poison to Cats.

ILLINOIS PARROT.

Eggs.

The eggs of Parrots are roundish, and generally of a pure white; those of the Maccaws spotted, like the eggs of a Partridge. The number usually two; yet the Count *De Buffon* gives an instance of a Perroquet, in a state of confinement, which laid four eggs every spring, during five or six years: one of the eggs was addle; the others productive *.

133. ILLINOIS.

Tui-apeta-jube, *Margrave*, 206, N° 2.—*Wil. Orn.* 116.—*Raii. Syn. Av.* 34.—*De Buffon*, vi. 269.—*Pl. Enl.* 528.—*Latham*, i. 228.

Psittacus Pertinax, *Lin. Syst.* 142.

La Perruche Illinoise, *Briffon*, iv. 353.

Yellow-faced Parrot, *Edw.* 234.

P. With a cinereous bill: orange-colored irides: forehead, cheeks, and sometimes the hind part of the head, of a rich orange: crown, upper part of the body, tail, and coverts of the wings, of a fine green: primaries green, edged externally with blue: breast and belly of a yellowish green: vent yellow: tail very long and cuneiform. Of the same size with the former.

PLACE.

Inhabits the interior parts of *North America*, in the country of the *Illinois*, south of lake *Michigam*: it is also met with in the *Brazils*. Is a lively bird; but its voice not very articulate. Father *Charlevoix* met with some on the banks of the *Theatiki*, a river that rises a little south of lake *Michigam*, and runs into the *Mississipi*. He says, that those he saw were only stragglers, which migrated before winter; but that the main body passed the whole year on the borders of the *Mississipi* †.

LATITUDES OF
PARROTS.

The Count *De Buffon* confines the whole genus of Parrots to exactly twenty-five degrees on each side of the Equator ‡. It always

* *Ois.* vi. 115.

† *Journal Historique*, vi. 124.

‡ *Ois.* vi. 82.

gives

gives me pain to differ in opinion with so illustrious a character; but I must produce my authorities of their being common at far greater distances. On the continent of *America*, two species have been observed by the *Spaniards* about *Trinity Harbour*, in the South Seas, in north lat. 41. 7 *. Dr. *Forster* saw, in the raw, rainy latitude of *Dusky Bay*, in *New Zealand*, 46 south, two kinds. In the neighborhood of *Botany Bay*, in *New Holland*, in south lat. 34, five species were discovered; among which, the greater variety of the sulphur-crested *Cockatoo* appeared in amazing multitudes. But what is most wonderful, a small species of this tender genus is to be met with as low as *Port Famine*, in the streights of *Magellan*, in south lat. 53. 44 †, in flocks innumerable. They inhabited the vast forests of the country. Their food must be confined to buds and berries; for no sort of fruit-trees have been observed there. The forests likewise were frequently bounded by mountains, probably cloathed with eternal snow.

* *Barrington's Miscellanies*, 489. 491.

† See *Spilbergen's Voy.* in *Purchas*, i. 80; *Wood's*, in *Dampier's Voy.* iv. 112; and *Byron's*, in *Hawkefworth's Coll.* i. 38. Besides these authorities, Lieut. *Gore* (since Captain) and Mr. *Edwards*, now surgeon at *Caernarvon*, who sailed with Mr. *Byron*, confirmed to me the existence of these birds in the streights of *Magellan*.

VI. C R O W. *Gen. Birds XII.*

134. RAVEN.

*Br. Zool. i. N° 74.**Corvus Corax, Lin. Syß. 155.**Korp, Faun. Suec. N° 85.—Leem, 240.—Faun. Groenl. p. 62.—Latham, i. 367.**—De Buffon, iii. 13.—Lev. Mus.*

C. With the point of the bill a little incurvated, with a small tooth on each side, of a black color, glossed with blue. It varies to white, and to pied. In the *Feroe* isles is a breed which are black and white, and are said to keep in a place separate from the common kind*.

SIZE.

The largest of the genus. Weighs three pounds. Length two feet two inches.

PLACE.

Very numerous as far north as *Finmark, Iceland, and Greenland*, where it frequents the huts of the natives, and feeds on the offals of the Seals†. Preys in concert with the White Bear, Arctic Fox, and Eagle. Devours the eggs of birds, especially the Ptarmigan: eats shore-fish, and shell-fish: drops the last from on high to break them, and get at the contents. Turns round in the air, and is dexterous; changes its prey from its bill to its feet, or from its feet to its bill, by way of ease. Eats also berries, and, when almost famished, dried skins and excrements. Nests on high rocks, which overhang and afford a canopy. Couples in *March*; lays in *April*. Each preserves a district to itself. The male sits in the day; the female in the night: the former sleeps close by its mate. Have

* *Brunnick, p. 8.*† *Egede, 64.*

strong

strong affection to their young brood. Hearing its croaking echoed, repeats it; as if admiring its own note. At approach of storms, collects under shelter of rocks.

Caught by the natives. Its flesh is eaten. The skins reckoned the best for cloathing: the wings used for brushes: the quills split, are made into fishing-lines. They also inhabit *Newfoundland*, and now and then appear as low as *Virginia* and *Carolina* *.

This bird is, among the *American* savages, an emblem of return of health. Their physicians, or rather magicians, when they visit a sick person, invoke the Raven, and mimic his croaking voice †. The northern *Indians*, on the contrary, detest this and all the Crow kind ‡. It inhabits *Kamschatka* and *Siberia*; but not within the *Asiatic* Arctic regions.

The RAVEN in winter lives in *Sweden*, in flocks, near the shores of the sea, to support itself on whatsoever the waves fling up. The rustics esteem it a bird of ill omen, especially when it is heard croaking near the houses of the sick. They fear shooting this bird, under a notion that it will spoil their gun.—Mr. Oedman.

Br. Zool. i. N° 75 †—*Latham*, i. 370.

Blaae Raage, Brunnick, N° 29.

Corvus Corone, Faun. Suec. N° 86.

La Corbine, ou l'Corneille, De Buffon, iii. 45.—*Pl. Enl.* 483.—*LEV. MUS.*

135. CARRION.

C. With the plumage wholly black, glossed with violet: bill strong, thick, and arched: nostrils covered with strong black bristles: ends of the feathers of the tail slightly pointed. LENGTH eighteen inches and a half. Weight from twenty to twenty-two ounces §.

* *Lawson*, 139.

† *Adair's Hist. Am.* 173.

‡ *Mr. Hutchins.*

§ *Voyage*, i. 121.

PLACE.

Inhabits the province of *New York*, and the inland parts of *Hudson's Bay*. Mr. *Blackburn* observed, that it retains there the same manners as the *European* species; and never migrates from *New York*. Mr. *Kalm* says, that they fly in great numbers, and have a cry much resembling the Rook *. By his account, they appear of a mixed nature, feeding not only on grain, but on carrion; and are also very pernicious to young poultry. Like Rooks, they pull up the corn of the country, the new-sown maize; and, when it ripens, pick a hole in the leaves which surround the ears, exposing it to corruption, by letting in the rain. The inhabitants of *Pennsylvania* and *New Jersey* were wont to proscribe them, setting three pence or four pence on the head of each Crow; but the law was soon repealed, because of the great expence it brought on the public stock †. Mr. *Kalm* also remarks this agreement with the Rook species, that they settle much on trees, both in *February* and the spring.

These birds are so rare in *Sweden*, that *Linneus* gives only one instance of its being killed in his country. Yet it is found in the diocese of *Drontheim*, and in the *Feroe* islands. They are scarce in *Russia*; and only in the north. Grow more common in *Siberia*, and are found plentifully beyond the *Lena*, where the Hooded Crow ceases. Was observed about *Botany Bay*, in *New Holland*; and is met with in the *Philippine* isles ‡.

The CARRION CROW is never seen farther north than *Norcopin*, lat. 58. 45.—Mr. *Oedman*.

* See article Rook, p. 292, A. where a comparison is made of the differences between these two birds.

† *Voyage*, ii. 65.

‡ *De Buffon*, iii. 66.

Br. Zool. i. N° 78.—*Latham*, i. 392.—*De Buffon*, iii. 85.
Corvus Pica, Skata, Skiura, Skara, *Faun. Suec.* N° 92.—*LEV. MUS.*

136. MAGPIE.

C. Variegated with black and white, the black most beautifully glossed with green and purple: the tail very long, cuneiform, black, resplendent with the same rich colors as the body. Length eighteen inches: weight nine ounces.

Visits *Hudson's Bay*, where the natives call it *One ta-kee Aske*, or the *Heart-bird*. It migrates, and but seldom appears there*.

Is found in *Europe*, as high as *Wardhuys*, in lat. 71½. It is esteemed there an augural bird. If it perches on the church, it is supposed to portend the death or removal of the minister: if on the castle, that of the governor†. The Magpies swarm in the temperate parts of *Russia*. Common in *Siberia*, and even as far as *Kamtchatka*, and the isles.

PLACE.

Corvus Canadensis, *Lin. Syst.* 158.—*Latham*, i. 389.
 Le Geay Brun de Canada, *Briffon*, ii. 54.—*De Buffon*, iii. 117.—*LEV. MUS.*

137. CINEREOUS.

C. With a black bill, strong, strait, notched near the end of the upper mandible: nostrils covered with a tuft of whitish feathers reflected downwards: the forehead, cheeks, and under part of the body, of a dirty reddish white: the feathers on the crown long and black, forming a species of crest, like that of the *English Jay*: the plumage on the back brown, silky, loose, and unwebbed, like that of the *Jay*: wings black: tail long, cuneiform, black; the three outmost feathers tipped with dirty white: legs black. LENGTH near eleven inches: extent fifteen. Weight two ounces and a half.

* *Phil. Transf.* lxii. 387.† *Leems*, 241.

PLACE.

Inhabits *Hudson's Bay*, *Newfoundland*, and *Canada*, and the woods on the western coasts of *America*. These birds breed early in spring: their nests are made of sticks and grass, and built in pine-trees. They have two, rarely three, young ones at a time. Their eggs are blue. The young are quite black, and continue so for some time. They fly in pairs. The male and female are perfectly alike. They feed on black moss, worms, and even flesh. When near habitations or tents, they are apt to pilfer every thing they can come at, even salt meat. They are bold, and come into the tents to eat victuals out of the dishes, notwithstanding they have their hoard of berries lodged in the hollows of trees. They watch persons baiting the traps for Martins, and devour the bait as soon as they turn their backs. These birds lay up stores for the winter; and are seldom seen in *January*, unless near habitations: they are a kind of mock-bird. When caught, they pine away, and die, tho' their appetite never fails them*. Detested by the natives of *Hudson's Bay*.

138. BLUE.

Jay, *Clayton's Virginia*.—*Phil. Transf.* iii. 590.—*Lawson*, 141.

Blue Jay, *Catesby*, i. 15.—*Edw.* 239.—*Latbam*, i. 386.

Corvus Cristatus, *Lin. Syst.* 157.

Le Geay Bleu de Canada, *Briffon*, ii. 55.—*De Buffon*, iii. 120.—*BL. Mus.*
—*LEV. Mus.*

C. With a strong thick bill: head adorned with a rich blue crest: a stripe of black from the bill extending beyond the eyes: throat and cheeks white: neck furrounded with a black collar: breast of a pale vinaceous red: belly white: back of a pale purple: coverts of the wings and secondaries, of a rich blue,

• *Mr. Hutchins.*

beautifully

STELLER'S CROW.

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beautifully barred with black; the secondaries, and one order of the coverts, tipped with white: tail long and cuneiform, barred with blue and black; the tips of all white, excepting those of the two middlemost: legs black. LENGTH twelve inches.

Inhabits *Newfoundland, Canada*, and as far south as *Carolina*. Has the same actions and jetting motion as the *English Jay*, but its cry is less harsh. It feeds on fruits and berries, and commonly spoils more than it eats. It is particularly fond of the berries of the bay-leaved *Smilax*. Resides in the country all the year. Lays in *May* five or six eggs, of a dull olive with rusty spots.

PLACE.

C. With a crested head: bill, neck, and back, black: lesser coverts of the wings dusky; the others of a rich resplendent blue: exterior webs of the primaries of the same color; the inner dusky; the secondaries of a beautiful rich blue, crossed with narrow black bars, remote from each other: the rump, belly, and breast, of a dull blue: tail very long, cuneiform, and of a fine glossy blue; the middle feathers slightly barred. SIZE of an *English Jay*.

139. STELLER'S.

Inhabits the woods about *Nootka* or *George sound*, in *North America*. It had been before discovered by *Steller*, when he landed on the same side of that continent. Described from a specimen in the collection of Sir *JOSEPH BANKS*.

PLACE.

* *Latbam*, i. 387.



A. Rook, *Br. Zool.* i. N° 76.—*Latham*, i. 372.
Corvus Frugilegus, Roka, *Faun. Suec.* N° 87.—*De Buffon*, iii. 55.

C. Black, glossed with purple: a tinge of dull green over part of the tail: the ends of the feathers of the tail broad, and rounded; those of the Crow, acute: the bill straiter, slenderer, and weaker, than that of the Carrion Crow: the length two inches and a half; that of the latter only two inches and a quarter. The bill of the Crow is of a more intense black. The nostrils and base of the bill of the Rook naked, and whitish, occasioned by being often thrust under ground in search of food. The WEIGHT of both nearly the same, about twenty-one ounces: the LENGTH about eighteen inches: the EXTENT of wings in the Rook three feet one inch and a half; of the Crow, two inches and a half less*.

PLACE.

The Rook has not been observed in *Sweden*, except in the southern province of *Scania*, and the isle of *Oland*. It breeds there; but is driven away by the severity of the winter. No mention is made of it in the *Danish* or *Norwegian* Faunæ. Is common in *Russia*, and the west of *Siberia*; but there are none in the east. They migrate in the beginning of *March* to the environs of *Woronesch*, and mingle with the common Crows †.

* I once had the curiosity to compare the measurements of these common birds, and found them as above; but they are often inferior in sizes to the subjects I examined.

† *Extracts*, i. 103.

- B. HOODED CR. *Br. Zool.* i. N° 77.—*Latbam*, i. 374.
Corvus Cornix, *Kraka, Faun. Suec.* N° 88.
Krage, Leems, 239.—*De Buffon*, iii. 61.

C. With black head, wings, and tail; ash-colored body.

Inhabits *Europe*, as high as the *Feroe* islands and *Lapmark*, where it continues the whole year; but in the northern countries often retires to the shores, where it lives on shell-fish. Is very common in all *Russia* and *Siberia*: none beyond the *Lena*. Migrates to *Woronesch*, and passes the winter there. Grows very large beyond the *Ob*, and often varies to entire blackness. This bird, and the Raven, in *October* quit the *sub-alpine* woods, where they breed; and spread all over the plains of *Italy*. This species extends to *Syria*, as do the Raven, Crow, Jackdaw, and Magpie*.

PLACE.

It is very singular, that the HOODED CROW, when it migrates, at the approach of winter, out of *Smoland*, retires into *Upland*, a province three degrees to the north of the former: there it lives during winter, near the shores, in the manner of the Raven. It is a bird detested by the natives. Feeds on the eggs of the wild Geese and Ducks. Is driven away from the isles by the BLACK-BACKED GULL.—*Mr. Oedman*.

This species, the RAVEN, CROW, JACKDAW, PIE, and JAY, pass their winter at *Woronesch* †, removing probably from hotter as well as colder climates; for three of the above can endure the severest cold.

* *Ruffel's Aleppo*, 69.

† *Extraits*, i. 100.

C. JACKDAW,

- C. JACKDAW, *Br. Zool.* i. N° 81.—*Latham*, i. 378.
Kaia, Faun. Suec. N° 89.—*De Buffon*, iii. 69.

C. With white irides: hind part of the head light grey: breast and belly dusky ash: rest of the bird black. LENGTH thirteen inches.

PLACE.

Inhabits as far north as *Sondmor*: is sometimes seen in the *Feroe* isles. Migrates from *Smoland* and *East Gotbland* the moment that harvest ends; and returns in the spring, attendant on the Stares. Winters about *Upsal*, and passes the night in vast flocks in ruined towers, especially those of antient *Upsal*. Is seldom met with beyond *Helsingeland*, a province lying between lat. 61. and 62. 33. Inhabits towers, but often uses the deserted nests of Woodpeckers. Common over all *Russia* and the west of *Siberia*. A few are seen beyond lake *Baikal*. Are migratory, unless in the south of *Russia*.

- D. NUTCRACKER, *Br. Zool.* ii. App. p. 625.—*Latham*, i. 400.—*De Buffon*, iii. 122.
Merula Saxatilis, *Aldr. Av.* ii. 284.
Corvus Caryocatactes, *Notwecka, Notkraka, Faun. Suec.* N° 91.

C. With primaries and tail black, the last tipt with white: vent white: rest of the plumage of a rusty brown: crown, and coverts of the tail, plain; every other part marked with white triangular spots. SIZE of a Jackdaw.

PLACE.

Is found as high as *Sondmor*. Common in the pine-forests of *Russia* and *Siberia*, and even in *Kamischatka*. Lives on nuts and acorns,

acorns, and on the kernels of pine-cones. Nests in the bodies of trees, which it perforates like the Woodpecker.

The NUTBREAKER comes very late into *Sweden*; and stays there till the nuts are gathered. Is not to be seen beyond *Upland*. Hazel nuts rarely are to be met beyond *Gefle*, lat. 60. 45: they have indeed been planted, by Mr. *Hogstrom*, at *Skelesta* near the arctic circle: they endured the winter, but did not bear fruit. The nuts of *Oland* are greatly sought after in *Sweden*, and thought there as sweet as almonds.—Mr. *Oedman*.

- E. JAY, *Br. Zool.* i. N° 79.—*Latham*, i. 384.—*De Buffon*, iii. 107.
Corvus Glandarius, *Allonskrika*, *Kornskrika*, *Faun. Suec.* N° 90.

C. With a black spot on each side of the mouth: very long feathers on the head: body purplish ash: greater coverts of wings beautifully barred with rich blue, black, and white. LENGTH thirteen inches.

Is met with as high north as *Sondmor*. Not migratory. Common in the woods of *Russia* and *Siberia*; but none beyond the *Lena*. It is met with again in *China*.

The JAY is eaten in *Sweden*; and taken in springes, baited with the berries of the mountain ash, or *sorbus aucuparia*.—Mr. *Oedman*.

PLACE.

- F. Rock, Greater Redstart, *Wil. Orn.* 197.
 La Paiffe Solitaire, *Belon Oys.* 322.
 Codiroffo Maggiore, *Olina*, 47.—*Latham*, i. 176.—*De Buffon*, iii. 354.—*Aldr. Av.* ii.
 282.
 Stein-Rotela, *Gefn. Av.* 732.

C. With crown, and neck above, and coverts of wings, brown and dirty white. In the males, the middle of the back marked with a spot, consisting of a bar of blue, black, and rust-colored: throat, breast, and belly, orange, spotted with white, and a few dusky spots: two middle feathers of the tail dusky; the rest ferruginous: has the same loose silky texture of feathers as the Jay. SIZE of a Stare.

PLACE.

Found as high as the forests of *Lapland*. Is called by the *Swedes*, *Lappskata* and *Olyckfugl*; by the *Norwegians*, *Gertrudsfogel*; also *Ulyksfuegl*, from its being supposed to forebode ill-luck. *Linnaeus*, for the same reason, styles it *Lanius Infaustus*; and in his *Fauna*, *Corvus Infaustus* *. It is common in the woods of the north of *Russia* and *Siberia*. Is a most audacious bird. *Linnaeus* relates, that in dining amidst the *Lapland* forests, it would often snatch away the meat before him. Breeds in crevices of rocks. Feeds on worms and insects. Sings finely, and is often preserved in cages for its song.

* *Syst.* 138.—*Faun. Suec.* N° 93.

GARRULOUS ROLLER.

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ROLLER. *Gen. Birds, XIII.*

- G. GARRULOUS, *Br. Zool.* ii. App. p. 530 quarto, 624 octavo.—*Latham*, i. 406.—*De Buffon*, iii. 133.—*Aldr.* i. 395.
Coracias Garrula, Spank-kraka, Bla-kraka, *Faun. Suec.* N° 94.

R. With a naked spot beyond each ear: head, neck, back, breast, belly, and greater coverts of the wings, of a light bluish green: back ferruginous: coverts of the tail, lesser coverts of the wings, and lower parts of the secondaries, of a rich blue; primaries black above, blue beneath: middle feathers of the tail dirty green; the rest of a light blue: the exterior feathers on each side much longer than the rest, and tipped with black: legs yellowish. Size of a Jay.

This elegant bird is found not spread, but as if it were in a stream, from the southern parts of *Norway* to *Barbary* and *Senegal*: from the south of *Russia* to the neighborhood of the *Irtish*, only, in that empire; and southerly, to *Syria* *. In *Sweden*, it arrives with the *Cuckoo*; retires at the conclusion of the harvest †. It makes its nest in the birch, preferably to all other trees ‡; and in places where trees are wanting, such as *Malta* and *Barbary*, it forms its nest in clayey banks. *Zinanni* says it lays five eggs, of clear green, sprinkled with innumerable dark specks §. It feeds on fruits, acorns,

PLACE.

* *Ruffel's Aleppo*, 69.

† *Amæn. Acad.* iv. 583.

‡ *De Buffon*, iii. 139: from this circumstance, one of its German names is *Birch-beber*, or the *Birch Jay*.

§ *Zinanni delle Nova*, Sc. p. 68. tab. x. fig. 29.

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Q q

and

GARRULOUS ROLLER.

and insects. Is a shy bird; but, at times, is seen in company with Crows and Pies on the plough lands, picking up worms, and grains of corn. *Schwenckfelt* says, that in autumn it grows very fat, and is esteemed as a delicacy*. It is remarkably clamorous. Is migratory. *M. Adanson* observed them in *Senegal*, in flocks, in the month of *September*, and supposes they winter there †.

* *Av. Silvestræ*, 244.† *Voy. Senegal*, Engl. ed. 25. 107.

VII. ORIOLE. *Gen. Birds* XIV.

- Acotlchichi, *Fernand. Nov. Hisp.* p. 14.—*Wil. Orn.* 395.—*Raii Syn. Av.* 166.—*140. RED-WING.*
Latham, i. 428.
 Black Bird (2d sp.) *Lawson*, 139.
 Red-winged Starling, *Catesby*, i. 13.—*Du Pratz*, ii. 91.
 Le Troupiale a Ailes Rouges, *Briffon*, ii. 97.
 Le Commandeur, *De Buffon*, iii. 214.—*Pl. Enl.* 402.
 Oriolus Phœniceus, *Lin. Syst.* 161.

O. With black bill and legs: plumage of a fine jetty blackness, except the lesser coverts of the wings, which are of a bright scarlet, with the lowest row white. **LENGTH** ten inches. The **FEMALES** are of a dusky color.

Inhabit from the province of *New York* to the kingdom of *Mexico*. In *North America* they are called Red-winged Starlings, and Swamp Black-birds; in *Mexico*, *Commendadores*, from their red shoulders, resembling a badge worn by the commanders of a certain *Spanish* order. That kingdom seems to be their most southern residence. They appear in *New York* in *April*, and leave the country in *October*. They probably continue the whole year in the southern parts, at least *Catesby* and *Lawson* make no mention of their departure. They are seen in flocks innumerable, obscuring at times the very sky with their multitudes. They were esteemed the pest of the colonies, making most dreadful havock among the maize and other grain, both when new sown, and when ripe. They are very bold, and not to be terrified with a gun; for, notwithstanding

PLACE.

MANNERS.

RED-WING ORIOLE.

ing the sportsman makes slaughter in a flock, the remainder will take a short flight, and settle again in the same field. The farmers sometimes attempt their destruction, by steeping the maize in a decoction of white hellebore before they plant it. The birds which eat this prepared corn are seized with a vertigo, and fall down; which sometimes drives the rest away. This potion is particularly aimed against the PURPLE GRACKLES, or PURPLE JACKDAW, which consorts in myriads with this species, as if in conspiracy against the labors of the husbandman. The fowler seldom shoots among the flocks, but some of each kind fall. They appear in greatest numbers in autumn, when they receive additions from the retired parts of the country, in order to prey on the ripened maize.

USES.

Some of the colonies have established a reward of three pence a dozen for the extirpation of the Jackdaws: and in *New England*, the intent was almost effected, to the cost of the inhabitants; who at length discovered that Providence had not formed even these seemingly destructive birds in vain. Notwithstanding they caused such havock among the grain, they made ample recompence, by clearing the ground of the noxious worms * with which it abounds. As soon as the birds were destroyed, the reptiles had full leave to multiply: the consequence was the total loss of the crops, in 1749; when the *New Englanders*, late repentants, were obliged to get their hay from *Pennsylvania*, and even from *Great Britain*.

NEST.

The Red-winged Orioles build their nests in bushes, and among the reeds, in retired swamps, in the form of a hang-nest; leaving it suspended at so judicious a height, and by so wondrous an instinct, that the highest floods never reach to destroy it. The nest is strong, made externally with broad grass, a little plastered; thickly lined

* The Caterpillar of the *Bruchus Pisi*, or Pease Beetle, in particular. See *Kalm*, i. 173. 176.

with

WHITE-BACKED ORIOLE.

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with bent or withered grafts. The eggs are white, thinly and irregularly streaked with black.

Fernandez says, that in *Mexico* they build in trees near towns; and both he and *Catesby* agree, that they sing as well in a state of confinement as of nature; and that they may be taught to speak. I agree with *M. de Buffon*, that, in case the manner of their nidification is as *Fernandez* asserts, the disagreement in the different countries is very wonderful.

In *Louisiana* they appear only in winter, and are taken in a clap-net, placed on each side of a beaten path made on purpose, and strewed over with rice. As soon as the birds alight, the fowler draws the net, and sometimes takes three hundred at a haul. They are also eaten in the *English* colonies. *Fernandez* does not commend their flesh, which, he says, is unpalatable and unwholesome.

Du Pratz speaks of two kinds: this, and another which is grey and black, with a red shoulder, like the species in question. I suspect he forms out of the young birds, not yet arrived at full color, a new kind; or perhaps a female bird; for I have received from *Dr. Garden* one under that title, which agrees with the description given by *M. Du Pratz*. These are streaked with pale rusty brown: cheeks black: over each eye a white line: breast and belly black, spotted with pale brown: lesser coverts of the wings orange.

YOUNG, OR
FEMALES?

White-backed Maize Thieves, *Kalm*, ii. 274.

241. WHITE-
BACKED,

A Species mentioned barely as above by *Mr. Kalm*, with the addition of their being less than the last: that they sing finely, and appeared flying now and then among the bushes near *Saratoga*; but

PLACE.

but that he saw them for the first time near *New York*. As Mr. *Kalm* seems not to have had a distinct sight of these birds, it is possible that they are the WHITE-WINGED ORIOLES of Mr. *Latham*, ii. 440: the coverts of whose wings are white; the rest of the plumage entirely black. His species came from *Cayenne*.

142. BALTIMORE.

Baltimore bird, *Catesby*, i. 48.—*Latham*, i. 432.

Le Baltimore, *Briffon*, ii. 109.—*De Buffon*, iii. 231.—*Pl. Enl.* 506.

Oriolus Baltimore, *Lin. Syst.* 162.—*BL. MUS.*—*LEV. MUS.*

MALE.

O. With the head, throat, neck, and upper part of the back, black: lesser coverts of the wings orange; the greater black tipped with white: breast, belly, lower part of the back, and coverts of the tail, of a bright orange: primaries dusky, edged with white: two middle feathers of the tail black; the lower part of the rest of the same color, the remaining part orange: legs black.

FEMALE.

Head and back of the female olive, edged with pale brown: coverts of the wings of the same color, marked with a single bar of white: under side of the body, and coverts of the tail, yellow: tail dusky, edged with yellow. LENGTH of this species seven inches.

PLACE.

Inhabits from *Carolina** to *Canada*†. Suspend its nest to the horizontal forks of the Tulip or Poplar trees, formed of the filaments of some tough plants, curiously woven, mixed with wool, and lined with hairs. It is of a pear shape, open at top, with a hole on the side, through which the young discharge their excre-

* *Lawson*, 145.

† *De Buffon*.



Baltimore Oriole N^o 142.

J. Mazell Sculp



ments, and are fed. In some parts of *North America*, this species, from its brilliant color, is called the *Fiery Hang-nest*. It is called the *Baltimore* bird, from its colors resembling those in the arms of that nobleman.

It quits *North America* before winter, and probably retires to *Mexico*, the *Xochitototl* of *Fernandez* * seeming to be the same species.

Bastard Baltimore, *Catesby*, i. 49.—*Latham*, i. 433.

Le Baltimore Batard, *Briffon*, ii. 111.—*De Buffon*, iii. 233.—*Pl. Enl.* 506.

Oriolus Spurius, *Lin. Syst.* 162.—*BL. Mus.*—*LEV. Mus.*

143. BASTARD.

O. With the head, neck, and upper part of the back, of a full glossy black: breast and belly of a fine orange bay: lower part of the back, and coverts of the tail, of the same color: the lesser coverts of the wings light bay; the greater black, edged with dirty white: the quill feathers dusky, edged with white: tail cuneiform and black.

The head of the female, and hind part of the neck, deep olive: throat black: coverts of wings dusky edged with white; primaries and secondaries of the same colors: under side of the body of a greenish yellow: tail dusky, edged with yellow.

Inhabits *North America*. Arrives in *New York* in *May*. Lays five eggs; and usually hangs its nest in an apple-tree.

PLACE.

* *Av. Nov. Hisp.* 39.

BLACK, AND BROWN-HEADED ORIOLE.

144. BLACK.

Latbam, ii. 445, N^o 37.Le Troupiale Noir, *Briffon*, ii. 103. tab. x.—*De Buffon*, iii. 320.—*Pl. Enl.* 534.
—BR. MUS.

O. With a black bill, an inch long: legs of the same color: whole plumage black and glossy. LENGTH near ten inches. EXTENT one foot. WEIGHT two ounces and a quarter.

FEMALE. With head, breast, and belly, dusky, tinged with cinereous; the rest of the plumage of a greenish brown.

PLACE.

Inhabits *North America*, even as far as *Hudson's Bay*. Arrives there in the beginning of *June*, as soon as the ground is thawed sufficiently for them to get food, which is Worms and Maggots. They sing with a fine note till the time of incubation, when they desist, and only make a chucking noise till the young take their flight; when they resume their song. They build their nests in trees, about eight feet from the ground; and form them with moss and grass. Lay five eggs, of a dark color, spotted with black. Gather in great flocks, and retire southerly in *September*. A bird, which I apprehend to be only a lesser variety, is described by the *Comte de Buffon*, iii. 221. *Pl. Enl.* 606. *Latbam*, ii. 446.

145. BROWN-HEADED.

O. With the head of a rusty brown: the body and wings black, glossed with green: the tail of a dusky color. SIZE of a common Blackbird.—BR. MUS. LEV. MUS.

PLACE.

Inhabits *New York*, and appears there in small flocks during summer. Perhaps migrates to *St. Domingo*, where it is also found, and is called there, according to Mr. *Kuchan's* account, *Siffleur*, or Whistler; but differs from that described by M. *De Buffon*, iii. 230, which is entirely yellow beneath.

O. With

O. With dusky bill and legs: head, and hind part of the neck, of a blackish purplish hue, with the edges of the feathers rust-colored: from the bill, over and beneath the eyes, extends a black space, reaching to the hind part of the head: throat, under side of the neck, the breast, and back, black, edged with pale rust: belly dusky: wings and tail black, glossed with green. LENGTH between seven and eight inches.

146. RUSTY.

Appears in *New York* in the latter end of *October*, and makes a very short stay there: it probably is on its way southerly from *Hudson's Bay*, where it is also found.

PLACE.

Le Cassique de la Louisiane, *De Buffon*, iii. 242.—*Pl. Enl.* 646.

147. WHITE-HEADED.

O. With the head, neck, belly, and rump, white: the rest of the plumage changeable violet, bordered with white, or in some parts intermixed. LENGTH ten inches *French*.

Inhabits *Louisiana*.

PLACE.

O. With a dusky bill: head and throat pure white: ridge of the wing, some of the under coverts, first primary, and thighs, of the same color: all the rest of the bird dusky, in parts glossed with green: on the breast a few oblong strokes of white: legs dusky. LENGTH eight inches and a half. EXTENT thirteen and a half. WEIGHT an ounce and three quarters.

148. HUDSONIAN WHITE-HEADED.

Inhabits *Hudson's Bay*. A very rare species. Quere, if only differing in sex from the last.—*LEV. MUS.*

PLACE.

149. OLIVE.

Le Carouge Olive de la Louisiane, *De Buffon*, iii. 251.—*Pl. Enl.* 607.

O. With the head olive, tinged with grey: hind part of the neck, the back, wings, and tail, of the same color, tinged with brown, brightest on the rump and the beginning of the tail: the sides also olive, dashed with yellow; the same color edges the greater coverts and primaries: the throat is orange-colored: the under side of the body yellow: legs a brownish ash-color. LENGTH six or seven inches *French*. EXTENT from ten to twelve.

PLACE.

Inhabits *Louisiana*.

150. YELLOW-THROATED.

O. With a bright yellow stroke over each eye: cheeks and throat of the same color: all the rest of the plumage tinged with green, only some of the coverts of the wings are tipped with white: bill and legs dusky. LENGTH nine inches. EXTENT fifteen and a half.

PLACE.

Was shot in *Hudson's Bay*.

151. UNALASCHKA.

Latham, ii. 447, N° 40.

O. With a brown bill; between its base and the eyes a white mark: plumage above, brown; the middle of each feather clouded: chin white, bounded on each side by a dark diverging line: fore part of the neck and breast of a rusty brown: coverts of the wings, the secondaries, and tail, brown, edged with rust: primaries and belly plain: sides dusky: legs brown. LENGTH eight inches.

PLACE.

Brought by the late navigators from *Unalascbka*.

Latham,

SHARP-TAILED ORIOLE.

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Latham, i. 448.

152. SHARP-TAILED.

O. With the crown brown and cinereous: cheeks brown, surrounded by a border of light clay-color, commenced at the base of each mandible of the bill: throat white: breast, sides, and vent, of a dull pale yellow, spotted with brown: belly white: back varied with ash-color, black, and white: greater and lesser coverts of the wings dusky, deeply bordered with rust-color; primaries black, slightly edged with rust: the feathers of the tail slope off on each side to a point, not unlike those of a Woodpecker; are of a dusky color, and obscurely barred: the legs of a pale brown. SIZE of a Lark.

Inhabits the province of *New York*.—From Mrs. *Blackburn's* collection.

PLACE.

R r 2

VIII. GRACKLE.

VIII. GRAKLE. *Gen. Birds, XV.*

153. PURPLE.

Tequiquiacatzanatl *, *Fernandez Mex.* 21.La Pie de la Jamaïque, *Briffon*, ii. 41.—*De Buffon*, iii. 97.—*Pl. Enl.* 538.Merops Niger iride sub-argentea, *Brown's Jamaica*, 476.Purple Jackdaw, *Catesby*, i. 12.—*Latham*, i. 462.Black-bird, *Lawson*, sp. 2d, 139.—*Sloane Jamaica*, ii. 299.Gracula Quiscalia, *Lin. Syst.* 165.—*Bl. Mus.*—*Lev. Mus.*

G. With a black bill: silvery irides: head and neck black, glossed over with a most resplendent blue, variable as opposed to the light: back and belly, with green and copper-color, growing more dusky towards the vent: tail long, and cuneiform: legs black: wings and tail rich purple. Female entirely dusky; darkest on the back, wings, and tail.

SIZE.

LENGTH of the male thirteen inches and a half: the WEIGHT about six ounces. LENGTH of the female eleven inches and a half.

These birds inhabit the same countries as the Red-wing Orioles, and generally mingle with them. They sometimes keep separate; but usually combine in their ravages among the plantations of maize. After that grain is carried in, they feed on the seeds of the Water Tare Grass, or *Zizania aquatica*. Their good qualities, in clearing the country from noxious insects, have been recited before, in page 300, mixed with the history of their congenial companions.

* i. e. The Salt Starling, because in Mexico it frequents the salt lakes.

B O A T - T A I L G R A K L E .

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PLACE.

NEST.

They appear in *New York* and *Philadelphia* in *February*, or the beginning of *March*; and sit perched on trees near the farms, and give a tolerably agreeable note. They also build in trees, usually in retired places, making their nests externally with coarse stalks, internally with bents and fibres, with plaister at the bottom. They lay five or six eggs, of a pale blue color, thinly spotted and striped with black. After the breeding-season, they return with their young from their most distant quarters, in flights continuing for miles in length, blackening the very sky, in order to make their depredations on the ripening maize. It is unfortunate that they increase in proportion as the country is more cultivated; following the maize, in places they were before unknown, wheresoever that grain is introduced.

They migrate from the northern colonies at approach of winter; but continue in *Carolina* the whole year, feeding about the barn-door. Their flesh is rank, and unpalatable; and is only the food of birds of prey. The small Hawks dash among the flocks, and catch them in the air.

They are also found in *Mexico*, and in the island of *Jamaica*. They are sometimes eaten; but their flesh is hard, rank, and of bad nourishment.

Gracula Barrita, *Lin. Syst.* 165.—*Latbam*, i. 460.

Le Troupiale Noir, *Icterus Niger*, *Briffon*, ii. 105.—*De Buffon*, iii. 220.—*Pl. Enl.* 534.

Monedula tota nigra, *Sloane*, 299.—*Raii Syn. Av.* 185.—*LEV. MUS.*

154. BOAT-TAIL.

G. With the bill an inch and a half long, sharp, and black: plumage black, glossed with purple: tail cuneiform, expanded when walking; in flight, or on the perch, folded, so as to

BOAT-TAIL GRAKLE.

to form an oblong cavity in its upper part. LENGTH about thirteen inches.

PLACE.

Inhabits not only the greater *Antilles*, but the warmer parts of *North America*; consorting with the *Purple Grakles*, and *Red-winged Orioles*. Feeds on *maize* and insects; in the islands on *Bananas*.

CAROLINA CUCKOO.

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IX. CUCKOO. *Gen. Birds* XIX.

Cuckoo of Carolina, *Catesby*, i. 9.—*Lawson*, 143.

Le Coucou de la Caroline, *Briffon*, iv. 112.

Cuculus Americanus, *Lin. Syst.* 170.—*Latham*, i. 537.—*LEV. MUS.*—*BL. MUS.*

155. CAROLINA.

C. With the upper mandible of the bill black, the lower yellow: head, and whole upper part of the body, and coverts of the wings, cinereous; under side entirely white: primaries brown on their exterior, orange on their interior sides: tail long; two middle feathers entirely cinereous, the others tipped with white: legs dusky. LENGTH twelve inches.

Inhabits *North America*. Arrives in *New York* in *May*. Makes its nest in *June*, usually in apple-trees; and lays four eggs, of a bluish white color. The nest is made of small sticks and roots, and resembles greatly that of the *English Jay*; but is smaller. It retires from *North America* in autumn.

PLACE.

This bird, as well as all the foreign Cuckoos, have only the generical character of the well-known *European* species. They differ in their œconomy, nor have the opprobrious notes of that bird.

A. EUROPEAN



- A. EUROPEAN CUCKOO, *Br. Zool.* i. N^o 82. tab. xxxvi. fem.—*Latham*, i. 509.
Cuculus Canorus, *Gjok, Faun. Suec.* N^o 96.
Le Coucou, De Buffon, vi. 305.—*LEV. MUS.*

C. With dove-colored head, hind part of the neck, back, rump, and coverts: throat, and under side of the neck, of a pale grey: breast and belly white, barred with black: primaries dusky; inner webs marked with white oval spots: tail cuneiform; middle feathers black, tipped with white; the rest marked with white spots on each web.—FEMALE. Neck of a brownish red: tail barred with rust-color and black, and spotted with white.

PLACE.

Inhabits all parts of *Europe*, as high as *Saltens Fogderie*, in *Norway**, within the Arctic circle; and even at *Loppen*, in *Finmark*†. It is found equally high in *Asia*; and extends as far east as *Kamtshatka*. In all places it retains its singular note, and its more singular nature of laying its eggs in the nests of small birds, and totally deserting them‡. Of the above circumstance I beg leave to add a proof, which fell under my own notice in *June* 1778; when I saw a young Cuckoo, almost full grown (when I first discovered it) in the nest of a white Wagtail, beneath some logs in a field adjacent to my house. The Wagtail was as solicitous to feed it, as if it had been its own offspring; for, many days after the Cuckoo

* *Pontop.* ii. 75.† *Leems*, 291.‡ *Dr. PALLAS*.

fled,

W R Y N E C K.

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fled, it was seen often perched on the adjacent walls, still attended and fed by the Wagtail.

It arrives in the northern and eastern parts of *Asia*, about the tenth of *June*.

W R Y N E C K. *Gen. Birds XX.*

- B. WRYNECK, *Br. Zool.* i. N° 83.—*Latbam*, i. 548.
Jynx Torquilla Gjaktyta, *Faun. Suec.* N° 97.
Le Torcol, *De Buffon*, vii. 84.—*Pl. Enl.* 698.—*LEV. Mus.*

W. With a black and colored list dividing lengthways the crown and back: upper part of the body elegantly pencilled with grey, black, white, and ferruginous: tail consists of ten feathers, grey, speckled with black, and marked equidistant with four broad black bars.

Extends over all *Russia* and *Siberia*, and even to *Kamtschatka*. Found in *Sweden*, and as high as *Drontheim*, in *Norway*; and probably migrates as far as the *Cuckoo*. The *Swedes* call this bird *Gjaktyta*, or the bird which *explains the Cuckoo*: probably for the same reason as the *Welsh* and *English* style it the *Cuckoo's Man*, as it seems its attendant, and to point out its arrival.

PLACE,

X. WOODPECKER. *Gen. Birds XXI.*156. WHITE-
BILLED.Quatotomoni, *Fernand. Mex.* 50.—*Wil. Orn.* 390.Ipecu, *Marcgrave*, 207.—*Wil. Orn.* 138.—*Raii Syn. Quad.* 43.—*Latham*, ii. 553.*Picus principalis*, *Lin. Syst.* 173.Largest White-bill Woodpecker, *Catesby*, i. 16.—*Lawson*, 142.—*Barrere Fr.**Equin.* 143.—*Kalm*, ii. 85.Grand Pic noir à bec blanc, *De Buffon*, vii. 46.—*Pl. Enl.* 690.

W • With a bill of ivory whiteness; great strength; three inches long: irides yellow: a conic crest, of a rich scarlet color, on the hind part of the head: head, throat, neck, breast, and belly, black: beneath each eye is a narrow stripe of white, crooked at its beginning, running afterwards strait down the sides of the neck: upper part of the back, primary feathers, and coverts of the wings, black; lower part of the back, and the secondaries, white: tail black.

This is a gigantic species, weighing twenty ounces; and in bulk equal to a Crow.

PLACE.

Inhabits the country from *New Jersey* to the *Brazils*. Is in *North America* a scarce bird; in *South America* more common. It breeds in the kingdom of *Mexico* in the rainy season; for which reason *Nieremberg* styles it *Picus Imbrifetus* *. The *Spaniards* call them *Carpenteros*, Carpenters, on account of the multitude of chips which they hew out of the trees, either in forming their nests, or in search of food, insects, and worms, which lurk beneath the bark. They are very destructive to trees; for they have been known to cut out a

* *Euseb. Nieremberg.*

P I L E A T E D W O O D P E C K E R.

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measure of chips in an hour's time *. Instinct directs them to form their holes in a winding form, in order the better to protect their nests from the injury of the weather †.

Canada is destitute of these birds. The *Indians* of that severe climate purchase the bills from the savages of the more southern parts, at the rate of two or three Buck skins apiece, in order to form the coronets ‡ of their sachems and warriors. These coronets were made with several materials. Gay plumes formed the rays; the beaks of birds, claws of rare animals, and the little horns of their Roes, were the other ornaments. They were never worn but on high solemnities; either when a warrior sung the song of war, or was setting forward on his march to meet the enemy. He went forth like a *Spartan* hero, dancing, and crowned ||.

Larger Red-crested Woodpecker, *Catesby*, i. 17.

Le Pic noir hupe de Virginie, *Briffon*, iv. 29.

Picus Pileatus, *Lin. Syst.* 173.—*Latham*, i. 554.

Le Pic noir à huppe rouge, *De Buffon*, vii. 48.—*Pl. Enl.* 718.—*Lev. Mus.*—*Bl. Mus.*

157. PILEATED.

W. With a bill two inches long, of a dusky color on the upper, and whitish on the lower mandible: irides of a gold-color: a tuft of light brown feathers reflected over the nostrils: the crown adorned with a rich scarlet crest, bounded by a narrow buff-colored line; beneath that is a broad band of black, reaching from the eyes to the hind part of the head; under this is another line of buff-color, commencing at the bill, and dropping down on each side of the neck to the pinions of the wings: from the lower man-

* *Catesby*.

† *Barrers*.

‡ *Catesby*.

|| *Lastau Mœurs de Sauvage*, ii. 60.

S f 2

dible

GOLDEN-WING WOODPECKER.

dible a line of scarlet extends along the lower part of the cheeks: chin and throat white: fore and hind part of the neck, back, breast, belly, and tail, black: the wings black, marked with a double line of white: legs dusky. LENGTH eighteen inches. WEIGHT nine ounces.

PLACE.

Inhabits the forests of *Pensylvania* and *New York*. When the maize begins to ripen, this and the other kinds make great havock, by settling on the heads, and picking out the grain; or making holes in the leaves, and letting in the wet, to the destruction of the plant*. It breeds and resides the whole year in the country. It extends as high as lat. 50. 31. north; being found near the banks of *Albany* river, near four hundred miles from its discharge into *Hudson's Bay*. Lays six eggs, and brings forth its young in *June*. The *Indians* deck their Calumets with the crest of this species.

158. GOLDEN-WING.

Golden-winged Woodpecker, *Catesby*, i. 18.

Le Pic Rayé de Canada, *Briffon*, iv. 70.

Picus Auratus, *Lin. Syst.* 174.—*Latbam*, i. 597.

Le Pic aux ailes dorees, *De Buffon*, vii. 39.—*Pl. Enl.* 693.—*LEV. MUS.*—*BL. MUS.*

W. With a black bill, bending like that of a Cuckoo: crown cinereous; on the hind part a scarlet spot: cheeks and under side of the neck of a pale red: from each corner of the mouth a black line extends along the cheeks: the upper part of the breast is marked with a black crescent; the remainder and the belly whitish spotted with black: back and coverts of wings of a fine pale brown, barred with black: the primaries cinereous; their shafts of a most elegant gold-color; the under side of the webs of a

• *Kalm.*

glossy

FERRUGINOUS WOODPECKER.

317

glossy yellow: rump white, spotted with black: tail black, edged with white; the shafts of all the feathers gold-colored, except those of the two middle feathers: legs dusky. LENGTH twelve inches. WEIGHT five ounces. The FEMALE wants the black on each side of the throat.

Inhabits from *Hudson's Bay* to *Carolina*, and again on the western side of *North America*. In the first is migratory, appearing in *April*, and leaving the country in *September*. All the *American* Woodpeckers agree with those of *Europe* in building in hollow trees, and in laying six white eggs. The natives of *Hudson's Bay* call this species, *On-thee-quan-nor-ow*, from the golden color of the shafts and under side of the wing feathers *.

The *Swedish Americans* call it *Hittack*, and *Piut* †; words formed from its notes. It is almost continually on the ground; and never picks its food out of the sides of trees, like others of the genus: neither does it climb, but sits perched like the Cuckoo; to which it has some resemblance in manners, as well as form. It feeds on insects. Grows very fat, and is reckoned very palatable. It inhabits the *Jerseys*, and other provinces to the south, the whole year.

Latbam, i. 592.

Le Pic Mordoré, *De Buffon*, vii. 34.—*Pl. Enl.* 524.

159. FERRUGINOUS.

W. With a dusky bill: the crown and pendent crest of a pale yellow: a crimson bar extends from the mouth along the lower part of the cheek: the cheeks, back, and coverts of the wings, of a deep ferruginous color: lower part of the back of a pale yellow: primaries ferruginous, barred on their inner webs with black. SIZE of the Green Woodpecker.

* *Phil. Tr.* lxii. 387.

† *Kalm*, ii. 36.

This

RED-HEADED WOODPECKER.

PLACE.

This new species was sent to me by Dr. Garden, of Charlestown, South Carolina.

160. RED-HEADED.

Red-headed Woodpecker, *Catesby*, i. 20.—*Lawson*, 3d sp. 143.—*Du Pratz*, 92.—*Latham*, i. 561.

Picus Erythrocephalus, *Lin. Syst.* 174.

Le Pic a teste rouge, de la Virginie, *Briffon*, iv. 53.—*Pl. Enl.* 117.

Le Pic noir a domino rouge, *De Buffon*, vii. 55.—*Pl. Enl.* 117.—*LEV. Mus.*—*BL. Mus.*

W. With a lead-colored bill: head and neck of the most deep and rich scarlet: back, coverts of wings, primaries, and tail, of a glossy blackness: the secondaries white, marked with two black bars: breast and belly white: legs black. The head of the FEMALE is brown. LENGTH nine inches and a half. WEIGHT two ounces.

PLACE.

Inhabits *Pennsylvania*, and the neighboring provinces. Feeds on maize and apples; and is a most destructive species. They pick out all the pulp, and leave nothing but the mere rind. They feed also on acorns. They were formerly proscribed; a reward of two pence was put on their heads: but the law was repealed. They migrate southward at approach of winter. When they are observed to linger in numbers in the woods, in the beginning of winter, the inhabitants reckon it a sign of a mild season*.

This species extends across the continent to the western coast of America.

* *Kalm*, ii. 87.

CAROLINA, AND SPOTTED WOODPECKER.

319

Red-bellied Woodpecker, *Catesby*, i. 19.

Picus Carolinus, *Lin. Syst.* 174.—*Latbam*, i. 570.

Le Pic varié de la Jamaïque, *Briffon*, iv. 59.—*De Buffon*, vii. 72.

Woodpecker of Jamaica, *Edw.* 244.—*Bl. Mus.*

161. CAROLINA.

W. With the forehead, crown, and hind part of the head, of an orange red; under side of a light ash-color, tinged with yellow: the vent spotted with black: the back and wings closely barred with black and white: middle feathers of the tail black, the outmost barred with black and white. The crown of the female is light grey: hind part of the head red. **LENGTH** eleven inches. **WEIGHT** two ounces eleven penny-weights.

Inhabits *North America*, and the greater *Antilles*.

PLACE.

Great Spotted Woodpecker? *Br. Zool.* i. N° 85.—*Latbam*, i. 564.

Le Pic varié, *Briffon*, iv. 34.—*De Buffon*, vii. 57.—*Pl. Enl.* 196. 595.

Picus Major, *Faun. Suec.* N° 100.—*LEV. Mus.*—*BL. Mus.*

162. SPOTTED.

W. With buff forehead; black crown, bounded behind with a crimson band: vent feathers crimson: back black: scapulars white: wings and tail barred with black and white: breast and belly white, tinged with yellow. **LENGTH** nine inches. **EXTENT** sixteen. **WEIGHT** two ounces three quarters. **FEMALE** wants the crimson marks.

Sent to Mrs. *Blackburn* from *New York*. Inhabits *Europe*, as high as *Lapmark*. Extends to the most eastern part of *Siberia*.

PLACE.

L'Epeiche

CANADA SPOTTED, AND HAIRY WOODPECKER.

163. CANADA.
SPOTTED.L' Epeiche de Canada, *De Buffon*, vii. 69.—*Pl. Enl.* 347.—*Briffon*, iv. 45.

W. With white forehead, throat, breast, and belly: crown black; beneath is a band of white, encircling the head; from each eye another of black, uniting behind, and running down the hind part of the neck; each side of this bounded by white; that again bounded by black, commencing at the base of the bill, and uniting with the scapulars: the back black; scapulars of the same color, mixed with a few white feathers: wings spotted with black and white: middle feathers of the tail black; the outmost black and white. SIZE of the last.

PLACE.

Inhabits *Canada*.

164. HAIRY.

Hairy Woodpecker, *Catesby*, i. 19.—*Latham*, i. 572.*Picus villosus*, *Lin. Syst.* 175.Le Pic varié de la Virginie, *Briffon*, iv. 48.L'Epeiche ou Pic Chevelu de Virginie, *De Buffon*, vii. 75.—*LEV. MUS.*—*BL. MUS.*

W. With the crown black: the hind part of the head marked with a crimson spot; the cheeks with two lines of white and two of black: whole under side of the body white: back black, divided in the middle lengthways with a line of white unconnected feathers, resembling hairs: the wings black, spotted in rows with white: two middle feathers of the tail black; the two outmost entirely white; the rest black, marked crossways with white. The female wants the red spot on the head. LENGTH nine inches. WEIGHT two ounces.

5

Inhabits

DOWNY WOODPECKER.

321

Inhabits from *Hudson's Bay* * to *Carolina*. In the last very destructive to apple-trees.

PLACE.

Smallest Spotted Woodpecker, *Catesby*, i. 21.

Picus Pubescens, *Lin. Syst.* 175.—*Latham*, i. 573.

Le Petit Pic varié de la Virginie, *Briffon*, iv. 50.

Fourth Woodpecker, *Lawson*, 143.

L'Epeiche ou Petit Pic varie de Virginie, *De Buffon*, vii. 76.—*LEV. MUS.*—*BL. MUS.*

165. DOWNT.

W. Of the size of a Sparrow. In all respects resembles the last, except in size; and in having the outmost feather of the tail marked with a single white bar.

Inhabits *Pennsylvania* and *Carolina*, and is very numerous. It is also found, but more rarely, near *Albany* fort, in *Hudson's Bay*. The Woodpecker tribe is the most pernicious of all the birds of *America*, except the PURPLE GRACLE; but this little species is the most destructive of its whole genus, because it is the most daring. It is the pest of the orchards, alighting on the apple-trees, running round the boughs or bodies, and picking round them a circle of equidistant holes. It is very common to see trees encircled with numbers of these rings, at scarcely an inch's distance from each other; so that the tree dries and perishes.

PLACE:

* *Phil. Transf.* lxii. 388.

166. YELLOW-
BELLIED.Yellow-bellied Woodpecker, *Catesby*, i. 21.*Picus Varius*, *Lin. Syst.* 176.—*Latham*, i. 574.Le Pic Varié, *Briffon*, iv. 62.Le Pic Varié de Carolina, *De Buffon*, vii. 77.—*LEV. MUS.*—*BL. MUS.*

W. With a crimson crown, surrounded by a line of black: cheeks white, with two lines of black: chin crimson: breast and belly light yellow; the first spotted with black: coverts black, crossed by two bars of white: primaries spotted with black and white: tail black; interior webs of the two middle feathers barred with white; the two outmost feathers edged with the same color. The FEMALE wants the red on the crown. LENGTH nine inches. WEIGHT one ounce thirteen pennyweights.

PLACE.

Inhabits the same country with the former. Is very numerous, and very destructive to the fruits.

167. YELLOW-
LEGGED.

THIS is inserted on the suspicious authority of *Albin**. He says, that it is of the size of the Little *English* Spotted Woodpecker; that the hind part of the head is black; the ridges of the wings, and the lower part of the belly, white; the rest of the plumage, and the tail, black; the legs yellow.

* Vol. iii. 9.—*Briffon*, iv. 24, who follows *Albin*, calls it, *Le Pic noir de la Nouvelle Angleterre*.

THREE-TOED WOODPECKER.

343

Three-toed Woodpecker, *Edw.* 114.—*Phil. Transf.* lxii. 388.—*Latham*, i. 600. 601.
Picus Tridaëtylus, *Lin. Syst.* 177.—*Faun. Suec.* N° 103.
 Le Pic varié de la Cayenne, *Briffon*, iv. 55.—*LEV. MUS.*

168. THREE-
TOED.

W. With black feathers reflected over the nostrils: crown of a bright gold color: irides blue: cheeks marked lengthways with three black and two white lines: hind part of the neck and back black; the last spotted on the upper part with white: coverts of the wings black; primaries black, spotted with white: all the under side of the body white; the sides barred with black: the middle feathers of the tail black; the outmost spotted with white: legs dusky: toes, two before, only one behind; which forms the character of this species. LENGTH eight inches. EXTENT thirteen. WEIGHT two ounces.

Inhabits *Hudson's Bay*, and *Norton Sound*, lat. 64. Is frequent in *Siberia*, and common as far as *Moscow*, in the alps of *Dalecarlia* in *Sweden*, and in those of *Switzerland* *.

PLACE.

* *M. Sprunglin's* collection at *Stettlin*, near *Bern*, who told me it was common among the *Alps*.



- A. BLACK W. *Picus Martius*, *Lin. Syst.* 173.
Spillkraka, *Tillkraka*, *Faun. Suec.* N^o 93.—*De Buffon*, vii. 41.—*Wil. Orn.* 135.—
Latham, i. 552.—*LEV. MUS.*

W. With the crown of the head of a rich crimson: the rest of the plumage of a full black: the head of the female marked with red only behind. LENGTH eighteen inches. EXTENT twenty-nine. WEIGHT near eleven ounces.

PLACE.

Inhabits the forests of *Germany*, *Switzerland*, and the north, from *Peterbourg* to *Ochotsk*, on the eastern ocean, eastward, and to *Lapmark* westward. It migrates to *Woronesch*, about the third of *March*, and continues coming in greatest numbers in *April*. Is called there *The Fusilier*; and is the most cunning, and difficult to be shot, of all the tribe.

MANNERS.

It does vast damage to trees, by making holes of a great depth in the bodies to nestle in. A bushel of dust and chips, a proof of its labors, are often found at the foot of the tree. Makes as much noise in the operation, as a woodman does with an axe. Rattles with its bill against the sides of the orifice, till the woods resound. Its note very loud. Lays two or three white semi-transparent eggs. Feeds on caterpillars and insects, especially *Ants*.

B. GREEN,

GREEN, AND GREY-HEADED WOODPECKER.

325

B. GREEN, *Br. Zool.* i. N° 84.—*Latham*, i. 577.

Picus Viridis, Wedkmar, Gronspik, Grongjoling, *Faun. Suec.* N° 99.—*De Buffon*, vii. 7.—*Lev. Mus.*

W. With crimson crown: green body; lightest below. LENGTH thirteen inches.

Inhabits *Europe*, as high north as *Lapmark*, where it is called *Zkaine**. Is found in *Russia*; but disappears towards *Siberia*. It inhabits the wooden steeples of *Sweden*, as well as trees.

PLACE.

C. GREY-HEADED, *Edw.* 65.—*Latham*, i. 583.

W. With a grey head, and neck of a bluish grey: nostrils covered with harsh black feathers, extending in a line to the eyes: a black line, beginning at the base of the lower mandible, points beneath the cheeks towards the hind part of the neck: under side of the body of the color of the head, dashed with green: all other parts so exactly like the last, that I should suppose it to have been a variety, had not my very scientific friend, *PALLAS*, assured me that it was a distinct species, and inferior in size to the common GREEN.

It is found in *Norway*, and among the *alps* of *Switzerland*†; and common in the north of *Russia*, and still more in *Siberia*. The *Tungusi*, of *Nijmaia Tungouska*, roast this species, bruise the flesh, and mix it with any grease, except that of the Bear, which dissolves

PLACE.

* *Leem.*, 292.

† Catalogue of *Swiss* birds in *M. Sprunglin's* cabinet, which that gentleman favored me with. This species was not unnoticed by the great *GESNER*. See his *Hist. Av.* ed. p. 710, line 20.

too

MIDDLE, AND LEST SPOTTED WOODPECKER.

too readily. They anoint their arrows with it, and pretend, that the animals, which are struck with them, instantly fall *.

- D. MIDDLE SPOTTED W. *Br. Zool. i. N° 86.*—*Latham, i. 565.*
Picus Medius, Faun. Suec. N° 101.—*Briffon, iv. 38.*

W. With a crimson crown and vent: in all other respects like the GREAT SPOTTED, N° 162, except in size, being rather less.

- E. LEST SPOTTED W. *Br. Zool. i. N° 87.*
Picus Minor, Faun. Suec. N° 102.
Le Petit Epeiche, De Buffon, vii. 62.—*Pl. Enl. 598.*—*Briffon, iv. 41.*—*LEV. MUS.*

W. With a crimson crown: the rest of the head, breast, and belly, like those of the former: back barred with black and white: the white on the wings diffused in broad beds. **WEIGHT** under an ounce. **LENGTH** six inches. **EXTENT** eleven.

PLACE.

The MIDDLE only is found in *Russia*. This, and the GREAT SPOTTED, extend to the eastmost parts of *Siberia*; but all three are found as high as *Lapmark* †, the extremity of northern *Europe*, far within the polar circle; a country which is one vast forest of pines, firs, and birch ‡. Innumerable insects, or their *larvæ*, lurk in all seasons in the bark of the trees; so that this tribe of birds is never compelled, for want of food, to shun even the most rigorous winters of that severe climate. It also bears the heats of the torrid zone; for I discovered it among the drawings in the collection of Governor *Loten*, made in the island of *Ceylon*.

* *Gmelin. Voy. Sibirie, ii. 113.*

† *Leems, 292.*

‡ *Flora Lapp. Proleg. 21.*

XI. KINGFISHER. *Gen. Birds* XXIII.

Kingfisher, *Catesby*, i. 69.

American Kingfisher, *Edw.* 115.

Le Martin pefcheur hupè de la Caroline, *Briffon*, iv. 512. & de *St. Domingue*, 515.

Alcedo Alcyon, *Lin. Syst.* 180.—*Latbam*, i. 637.

Le Jaguacati, *De Buffon*, vii. 210.—*LEV. MUS.*

169. BELTED.

K. With a black bill, two inches and a half long: head crested with long bluish grey feathers: above the upper mandible of the bill, on each side, is a white spot; beneath each eye is another: chin and throat white: the upper part of the breast crossed by a broad grey belt; the lower part, and belly, white: the sides of a vermilion color; in some crossing the breast: upper part of the neck, the back, and coverts of the wings, of a pleasant bluish grey: the secondaries of the same color; their ends, and those of the lower order of coverts, tipped with white: primaries black, barred with white: tail grey; the two middle feathers plain; the rest barred with white: the legs orange. LENGTH thirteen inches. WEIGHT three ounces and a half.

Inhabits *Hudson's Bay*, *Norton Sound*, and other parts of *North America*. The *Achalalasti*, i. e. the Devourer of fish, of the *Mexicans**, seems to be the same bird. It has the same cry, manners, and solitary disposition, with the *European* species; and feeds not only on fish, but Lizards. It makes its nest in the face of high

PLACE.

* *Fernandez, Nov. Hisp.* 13.

banks,

EUROPEAN KINGFISHER.

banks, penetrating deep into them in an horizontal direction. Lays four white eggs, which discharge the young in *June*. It migrates in *Mexico*; is there eaten, but is observed to have the same rankness as other piscivorous birds.



- A. EUROPEAN KINGFISHER, *Br. Zool.* i. N° 88.—*Latbam*, i. 626.
Le Martin-Pêcheur, *Buffon*, vii. 164.—*Pl. Enl.* 77.
Alcedo Ispida, *Lin. Syst.* 179.—*LEV. Mus.*

K. With the crown, and coverts of the wings, of a deep green, spotted with cærulean: scapulars and back bright cærulean: tail rich deep blue: breast and belly orange red.

PLACE.

Said by *Du Pratz* to be found in *North America*; but, as I never saw it in any collection, doubt the fact. Inhabits the temperate parts of *Russia* and *Siberia*, and is frequent about the *Jenesei*, but not farther east. It does not extend to *Sweden*, and it even seems a rarity in *Denmark* *.

The *Tartars* and *Ostiaks* use the feathers of this bird as a love-charm. They sling them on water, and preserve those which swim; believing, that the woman, whom they touch with one of these feathers, will immediately become enamoured with them. The *Ostiaks* preserve the bill, feet, and skin, in a purse, and imagine them to be preservatives against all sorts of misfortunes †.

* *Muller*, *Prod. Zool. Dan.* 13.

† *Gmelin*, *Voy.* ii. 112.

The

EUROPEAN KINGFISHER.

329

The most singular northern philtre, is a sort of mushroom, worn by the youth of *Lapland* in a purse, *ante pubem pendulo*. LINNÆUS's apostrophe is very diverting.

"O ridicula VENUS, tibi, quæ in exteris regionibus uteris *caffæa* et *chocolata*, conditis et saccharatis, vinis et bellariis, gemmis et margaritis, auro et argento, serico et cosmetico, saltationibus et conventiculis, musica et comædiis, tibi sufficit hic solus exsuccus fungus," *Flora Lapon.* 368.

XII. N U T H A T C H. *Gen. Birds XXIV.*

170. CANADA.

NUTHATCH, *Br. Zool.* i. N° 89 †—*Latham*, i. 648. 651.Le Torche-pot de Canada, *Briffon*, iii. 592.Sitta Europea Notwacka, *Faun. Suec.* N° 104.La Sittelle, *De Buffon*, v. 460.—*LEV. MUS.*

N. With the crown, hind part of the neck, and shoulders, black: back and rump of a light blue grey: over each eye a white line: cheeks white: primaries dusky, edged with grey: breast and belly of a pure white: two middle feathers of the tail grey; the others black, with a white spot at the end: vent rust-colored. *SIZE* of the *European*; of which it seems a mere variety.

PLACE.

Inhabits *Canada*, and as far south as *New York*; and extends to the western side of *America*, *Kamtchatka**, *Siberia*, and *Russia*; *Sweden*, and *Sondmor* † in *Norway*: and does not migrate.

171. BLACK-HEADED.

Nuthatch, *Cateby*, i. 22, lower figure.—*Latham*, i. 650. B.Le Torche-pot de la Caroline, *Briffon*, iii. 22.

N. With the bill, head, and hind part of the neck, black: over each eye is a white line: back of a fine grey: wings dusky, edged with grey: breast and belly, and vent feathers, red: two middle feathers of the tail grey; the rest black, marked with a white spot. *Less* than the *European*.

PLACE,

Inhabits the temperate parts of *America*.

* Among a small collection of drawings made in that country by one of our voyagers.

† *Strom*, 247.



Ferruginous Woodpecker N. 159.

Nuthatch N. 171.

LEST NUTHATCH.

331

Small Nuthatch, *Catesby*, i. 22.—*Briffon*, iii. 958.—*Latham*, i. 651. C.
La Petite Sittelle à tête Prune, *De Buffon*, v. 474.

172. LEST.

N. With a brown head, marked behind with a white spot: back grey: wings of a deep brown: under side of the body of a dirty white: two middle feathers of the tail grey, the others black.

Inhabits *Carolina*, and other parts of *North America*.

PLACE.

U u 2

XIII. T O D Y.

DUSKY TODY: HOOPOE.

XIII. T O D Y. *Gen. Birds XXV.*

173. DUSKY.

Todi Sp. quarta, *Pallas Spicil.* vi. 17.—*Latham*, ii. 661, N° 9.—BR. MUS.

T • With a bill half an inch long, broad at the base, slightly indented above the nostrils, and a little bent near the point; base beset with bristles; upper mandible brown, lower white: colors above dusky; below yellowish white: primaries and tail of the same color with the back, edged with dirty white: legs dark. SIZE of a Hedge Sparrow.

PLACE.

Inhabits *Rhode Island*. Has the actions of a Flycatcher. Frequents decayed trees, and feeds on insects. Has a brief agreeable note, which it repeats twice or thrice.—BR. MUS.

H O O P O E. *Gen. Birds XXVII.*

A. HOOPOE, *Br. Zool.* i. N° 90.—*Latham*, i. 687.—*De Buffon*, vi. 439.
Upupa Epops, Harvogel, Popp, *Faun. Suec.* N° 105.—LEV. MUS.

H. With a high crest, of pale orange tipped with black: back and wings barred with black and white: neck reddish brown: breast and belly white: only ten feathers in the tail; black, with a white

white crescent * across the middle: legs black. LENGTH twelve inches.

Inhabits *Europe*, as far as *Sweden*, where it is called *Harfogel*, or Soldier-bird, not only on account of its plumed head, but because the common people believe its appearance to be an omen of war.

PLACE.

The HOOPOE is called the *Harfogel*, or *Soldier-bird*, not from its crest but its note, uttering, as it runs on the ground, the note *Opp, opp, opp*, thrice repeating it, then hastens most swiftly to another spot, and repeats the same. *Opp*, in the *Swedish* language, signifies the same as *To Arms!* hence this bird has been styled the omen of war. The *Norwegians* style it *Ærfugl*; it is therefore likely that it may sometimes visit their country. It is properly a southern bird, and extends even to *Egypt* and *India*. Is common in the southern deserts of *Russia* and *Tartary*; grows scarcer beyond the *Ob*; yet some are seen beyond lake *Baikal*. Dr. *Pallas* confirms to me its filthy manners †. He assures, that it breeds, in preference, in putrid carcasses; and that he had seen the nest of one in the privy of an uninhabited house, in the suburbs of *Tzaritsyn*. Lays from two to seven cinereous eggs. Usually has no nest of its own. Breeds sometimes in hollow trees, holes in walls, or on the ground. Migratory.

* Correct the description of this part in the *British Zoology*.

† See *Br. Zool.* i. 258.—Is rarely seen in *Britain*.

XIV. CREEPER. *Gen. Birds XXVIII.*

174. EUROPEAN.

*Br. Zool. i. N° 91.—Catfishy, App. xxxvi.**Certhiu Familiaris Krypæ, Faun. Suec. N° 106.—Latham, i. 701.**Le Grimpereau, De Buffon, v. 481.—LEV. Mus.*

C. With head and neck brown, streaked with black: rump tawny: coverts of wings varied with brown and black: primaries dusky, edged with white, and edged and barred with ferruginous marks: breast and belly silvery: tail very long, consisting of twelve sharp-pointed feathers of a tawny hue.

PLACE.

Inhabits *North America*. Is found, but very rarely, in *Russia* and *Siberia*. Found in *Sweden*, and never quits the country; and extends as far north as *Sondmor* *.

175. BAHAMA.

*Bahama Titmouse, Catfishy, i. 59.**Yellow-bellied Creeper, Edw. 362.**Certhia Flaveola, Lin. Syst. 187.—Latham, i. 737.**Le Grimpereau de Martinique, ou le Sucrier, Brisson, iii. 611.**Le Sucrier, De Buffon, v. 542.*

C. With a dusky bill, head, and back: cheeks black: above each eye is a yellow line: rump yellow: wings dusky; the primaries crossed with a bar of white: neck, breast, and belly, yellow: tail black; the exterior feathers tipped with white.

The female hath the same marks, but the colors are more obscure.

* *Strom, 244.*

Inhabits

PURPLE CREEPER.

335

Inhabits the *Babama Islands*, and the *Antilles*; in the last it lives among the sugar-canes, and sucks the sweet juice which exudes from them *.

PLACE.

L'Oiseau pourpre à bec de grimpeur, *De Buffon*, v. 526.—*Latbam*, ii. 723.

175. A.
PURPLE
CREEPER.

C. Wholly of a purple color. Length four inches and a half. According to *Seba*, it inhabits *Virginia*; and is said to sing well.

* *De Buffon*, v. 542.

XV. HONEYSUCKER. *Gen. Birds XXIX**.176. RED-
THROATED.

- Passer Muscatus*, *Gesner*, *Av.* 655.
Ourisia five Tomineio, *Clus. Exot.* 96.
Guainumbi Prima, (scm.) *Marcgrave*, 196.
Colibry, *Viamelin*, or *Rising Bird*, *Jesselyn's Voy.* 100.—*Rarities*, 6.—*LEV. MUS.*
Trochilus Colubris, *Lin. Syst.* 191.—*Latham*, i. 769.
L'Oyseau Mouche a rouge gorge, *Brissou*, iii. 716.
Humming Bird, *Catesby*, i. 65.—*Lawson*, 146.—*Edw.* 38.
Le Rubis, *De Buffon*, vi. 13.

H. With a black bill, three quarters of an inch long: crown, upper part of the neck, back, and coverts of the wings, of a most resplendent variable green and gold: chin and throat of a shining rich scarlet, changing, as opposed to the light, from gold to a full black; these feathers lie nearly as compactly as scales: breast and belly white; the sides green: middle feathers of the tail green; the exterior purple.

The chin, throat, and whole under side, of the female, is white: the exterior feathers of the tail tipped with white.

MANNERS.

This bird, so admirable for its minuteness, vast swiftness of flight, food, and elegance of form and colors, gave rise to numbers of romantic tales. They were not the *Europeans* alone, who were struck with its great beauty; the natives of *America*, to whom it was so familiar, were affected with its gemmeous appearance, and bestowed on it titles expressive of its resplendent colors. Some nations called

* This genus may be divided into those with straight and those with incurved bills; but, there being none of the last in *North America*, the distinction is omitted.

RED-THROATED HONEYSUCKER.

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it *Ouriffia*, and *Guaracyaba*, or the Sun-beam; others, *Guaracygaba*, or Hairs of the Sun; others again named it *Huitzitzil*, or *Vicililin*, or the *Regenerated*; because they believed it died annually, and was re-animated at the return of the flowers it fed on: that it stuck its bill into the trunk of a tree, and remained lifeless for six months; when the vital powers re-migrated, and restored to nature one of its most brilliant wonders.

It flies with a swiftness which the eye is incapable of following. The motion of the wings is so rapid as to be imperceptible to the nicest observer. Lightning is scarcely more transient than its flight; nor the glare more bright than its colors. It never feeds but upon wing, suspended over the flower it extracts nourishment from; for its only food is the honied juice lodged in the nectarium, which it sucks through the tubes of its curious tongue. Like the Bee, having exhausted the honey of one flower, it wanders to the next, in search of new sweets. It admires most those flowers which have the deepest tubes. Thus the female *Balsamine*, and the Scarlet *Monarda*, are particular favorites. Whosoever sets those plants before the window is sure to be visited by multitudes of these diminutive birds. It is a most entertaining sight to see them swarming around the flowers, and trying every tube of verticillated plants, by putting their bills into every one which encircles the stalk. If they find that their brethren have been beforehand, and robbed the flower of the honey, they will, in rage, pluck off, and throw it on the ground.

The most violent passions animate at times their little bodies. They have often dreadful contests, when numbers happen to dispute possession of the same flower. They will tilt against one another with such fury, as if they meant to transfix their antagonists with their long bills. During the fight, they frequently pursue the conquered into the apartments of those houses whose windows are left

SWIFTNESS.

FOOD.

RAGE.

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X x

open,

RED-THROATED HONEYSUCKER.

open, take a turn round the room, as Flies do in *England*, and then suddenly regain the open air. They are fearless of mankind, and in feeding will suffer people to come within two yards of them, but on a nearer approach, dart away with admirable swiftness.

Fernandez Oviedo, an author of great repute, speaks from his own knowledge of the spirited instinct, even of this diminutive bird, in defence of its young: "So that when they see a man clime y^e tree where they have their nests, they flee at his face, and stryke hym in the eyes, commyng, goyng, and returnyng, with such swyftness, that no man woulde lyghtly beleeve it, that hath not seene it*."

Father *Charlevoix* gives a more apocryphal instance of the courage of this bird, in its attack on its disproportioned enemy the Raven. As soon as the last appears, the Honeysucker flies up like lightning, beds itself beneath the Raven's wing, and, piercing him with his needle-like bill, till the bird is heard to croak with agony, at length tumbles to the ground dead, either from the fall or the wound. This relation seems of a piece with the combat of the Wren with the Eagle, mentioned by *Aristotle* †: but, to do justice both to the *French* voyager and *Grecian* philosopher, I must add, that each of them delivered their reports from oral evidence.

NOTE.

Many fables have been related of the melody of the song of these birds. In fact, their only note is *Screeep, screeep, screeep*; but the noise which they make with their wings, especially in the morning, when numbers are in motion, is a sort of buzz or sound resembling that of a spinning-wheel. Their note is chiefly emitted when they happen to strike against each other in their flight.

NESTS.

Their nests are found with great difficulty, being built in the

* *Hist. of West Indies*, translated by *Richard Eden*, p. 199.

† *Hist. An. lib. ix. c. 11. vol. 2. 931.*—*Charlevoix*, v. 232.

branch

RED-THROATED HONEYSUCKER.

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branch of a tree, amidst the thick foliage. It is of elegance suitable to the architects; formed on the outside with moss; in the inside lined with the down or gossamer collected from the Great Mullein, or *Verbascum Thapsus*; but it is also sometimes made of flax, hemp, hair, and other soft materials. It is of an hemispherical shape. Its inner diameter an inch: its depth half an inch. The female is said to be the builder; the male supplying her with materials. Each assists in the labor of incubation, which continues during twelve days. They lay only two eggs, white, and as small as pease. The first is very singular, and contrary to the general rule of nature; which makes, in all other instances, the smallest and most defenceless birds the most prolific. The reasons of the exception in this case are double. The smallness of their bodies causes them commonly to escape the eyes of birds of prey; or if seen, their rapid flight eludes pursuit: so that the species is preserved as fully as if they had been the most numerous breeders.

The *Indians* of *Mexico*, *Peru*, and *Maynas*, make most exquisite pictures of the feathers of birds; but those of the *Honeysuckers* form the most brilliant part. Some use them as ornaments, and hang them as pendants in their ears, which give a blaze emulous of the Ruby and Emerald. In order to compose pictures, the *Indians* draw off the feathers with small pincers, and with fine paste most artfully join them together. They dispose them with such skill, as to give the true lights and shade to the performance, and imitate nature with the greatest fidelity. These were meant to decorate the idols and temples; for, before the depression of the *Indian* spirit by the tyranny of the *Spaniards*, religion was highly cultivated among the *Mexicans* and *Peruvians*; and, notwithstanding it was cruel, was attended with great splendor.

The generical name (in the *Brasilian* tongue) of these birds, is *Guianumbi*. There are several species, but only one which is found

RUFFED HONEYSUCKER.

- PLACE.** in *North America*. This kind is found from *Canada*, through that great continent, as low as *Louisiana*, and from thence to the *Brazils*.
- MIGRATES.** It breeds even in the northern climate of *Canada*; but retires not only from thence, but even from the warm provinces of *Carolina*, at approach of winter. In *Hispaniola*, the mountains of *Jamaica*, and the *Brazils*, countries where there are a perpetual succession of flowers, they reside throughout the year.

177. RUFFED.

Latham, i. 785.

H. With long strait slender bill: head of a rich variable green and gold: the feathers on the neck long, and disposed on each side in form of a ruff, and of a most brilliant crimson and copper color: back, and coverts of the tail, rust-colored: breast and belly white, the last dashed with red: feathers of the tail pointed; the ends brown, bottoms ferruginous: coverts of wings green: primaries deep blue.

FEMALE.

Crown, upper part of the neck, back, and coverts of wings and tail, green and gold: throat white, spotted with brown and variable copper: belly white, dashed with rust: primaries deep blue: middle feathers of the tail green; those on the side ferruginous at their bottoms, black in the middle, and tipped with white.

PLACE.

Inhabit in great numbers the neighborhood of *Nootka Sound*. The *Indians* brought them to our navigators alive, with a long hair fastened to one of their legs.

ORDER III. GALLINACEOUS.

XVI. TURKEY. *Gen. Birds XXXI.*

Turkey, *Jesselyn's Voy.* 99.—*Rarities*, 8.—*Clayton's Virgin.*—*Ph. Tr. Abridg.* iii.
590.—*Laruffen*, 149.—*Catesby*, App. xlv.

178. WILD.

Le Coc d'Inde, *Belon*, 248.

Gallo-pavus, *Gesner*, *Av.* 481.—*Icon.* 56.

Gallo-pavo, *Aldrov.* *Av.* ii. 18.

Gallo-pavo, the Turkey, *A.* 3.

Gallo-pavo *Sylvestris Novæ Angliæ*, a *New England Wild Turkey*, *Raii Syn.*
Av. 51.

Meleagris Gallo-pavo, *M. capite caruncula frontali gularique, maris pectore*
barbato, *Lin. Syst.* 268.

Le Dindon, *De Buffon*, ii. 132.—*Briffon*, i. 158. tab. xvi.—*Pl. Enl.* 97.

T. With the characters described in the definition of the genus. Color of the plumage dark, glossed with variable copper color and green: coverts of the wings, and the quill-feathers, barred with black and white. Tail consists of two orders: the upper, or shorter, very elegant; the ground color a bright bay; the middle feathers marked with numerous bars of shining black and green; the greatest part of the exterior feathers of the same ground with the others, marked with only three broad bands of mallard green, placed remote from each other; the two next are colored like those of the middle; but the end is plain, and crossed with a single bar, like the exterior.

DESCRIPTION.

TAIL.

The

The longer, or lower order, were of a rusty white color, mottled with black, and crossed with numerous narrow waved lines of the same color, and near the end with a broad band.

Wild Turkeys preserve a sameness of coloring. The tame, as usual with domestic animals, vary. It is needless to point out the differences, in so well-known a bird. The black approach nearest to the original stock. This variety I have seen nearly in a state of nature, in *Richmond* and other parks. A most beautiful kind has of late been introduced into *England*, of a snowy whiteness, finely contrasting with its red head, and black pectoral tuft. These, I think, came out of *Holland*, probably bred from an accidental white pair; and from them preserved pure from any dark or variegated birds.

WHITE
VARIETY.

SIZE.

The sizes of the wild Turkeys have been differently represented. Some writers assert, that there have been instances of their weighing sixty pounds; but I find none who, speaking from their own knowledge, can prove their weight to be above forty. *Josselyn* says, that he has eaten part of a Cock, which, after it was plucked, and the entrails taken out, weighed thirty *. *Lawson*, whose authority is unquestionable, saw half a Turkey serve eight hungry men for two meals †; and says, that he had seen others, which, he believed, weighed forty pounds. *Catesby* tells us, that out of the many hundreds which he had handled ‡, very few exceeded thirty pounds. Each of these speak of their being double that size, merely from the reports of others.

MANNERS.

The manners of these birds are as singular as their figure. Their attitudes in the season of courtship are very striking. The males fling their heads and neck backwards, bristle up their feathers,

* *New England Rarities*, 8.

† *Hist. Carolina*, 149 and 27.

‡ App. xlv.—The greatest certain weight is given by Mr. *Clayton*, who saw one that reached 38lb.—*Pb. Transf.*

WILD TURKEY.

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drop their wings to the ground, strut and pace most ridiculously; wheel round the females, with their wings rustling along the earth, at the same time emitting a strange sound through their nostrils, not unlike the *grurr* of a great spinning-wheel. On being interrupted, fly into great rages, and change their note into a loud and guttural gobble; and then return to dalliance.

NOTES.

The sound of the females is plaintive and melancholy.

IRASCIBLE.

The passions of the males are very strongly expressed by the change of colors in the fleshy substance of the head and neck, which alters to red, white, blue, and yellowish, as they happen to be affected. The sight of any thing red excites their choler greatly.

POLYGAMOUS.

They are polygamous, one cock serving or hens. They lay in the spring; and will lay a great number of eggs. They will persist in laying for a great while. They retire to some obscure place to sit, the cock, through rage at loss of its mate, being very apt to break the eggs. The females are very affectionate to the young, and make great moan on the loss of them. They sit on their eggs with such perseverance, that, if they are not taken away when addle, the hens will almost perish with hunger before they will quit the nest.

Turkies greatly delight in the seeds of nettles; but those of the purple Fox-glove prove fatal to them*.

SWIFT.

PERCH HIGH.

They are very stupid birds; quarrelsome, and cowardly. It is diverting to see a whole flock attack the common Cock; who will for a long time keep a great number at bay.

They are very swift runners, in the tame as well as the wild state. They are but indifferent flyers. They love to perch on trees; and gain the height they wish, by rising from bough to bough. In a wild state, they get to the very summit of the loftiest trees, even so high as to be beyond the reach of the musquet†.

* *De Buffon.*

† *Lawson, 45.*

In

GREGARIOUS.

In the state of nature they go in flocks even of five hundred *. Feed much on the small red acorns; and grow so fat in *March*, that they cannot fly more than three or four hundred yards, and are then soon run down by a horseman. In the unfrequented parts bordering on the *Mississipi*, they are so tame as to be shot with even a pistol †.

HAUNTS.

They frequent the great swamps ‡ of their native country; and leave them at sun-rising to repair to the dry woods, in search of acorns, and various berries; and before sun-set retire to the swamps to roost.

The flesh of the wild Turkey is said to be superior in goodness to the tame, but redder. Eggs of the former have been taken from the nest, and hatched under tame Turkeys; the young will still prove wild, perch separate, yet mix and breed together in the season. The *Indians* sometimes use the breed produced from the wild, as decoy-birds, to seduce those in a state of nature within their reach §.

Wild Turkeys are now grown most excessively rare in the inhabited parts of *America*, and are only found in numbers in the distant and most unfrequented spots.

The *Indians* make a most elegant cloathing of the feathers. They twist the inner webs into a strong double thread of hemp, or inner bark of the mulberry-tree, and work it like matting. It appears very rich and glossy, and as fine as a silk shag ||. They also make fans of the tail; and the *French* of *Louisiana* were wont to make umbrellas by the junction of four of the tails ¶.

* *Lawson*, 149.† *Adair's Amer.* 360.

‡ It is in the swamps that the loftiest and most bulky trees grow: the wet, with which they are environed, makes them a most secure retreat.

§ *Lawson*, 149.|| *Lawson*, 18.—*Adair*, 423.¶ *Du Pratz*, ii. 85.

When

W I L D T U R K E Y.

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When disturbed, they do not take to wing, but run out of sight. It is usual to chase them with dogs; when they will fly, and perch on the next tree. They are so stupid, or so insensible of danger, as not to fly on being shot at; but the survivors remain unmoved at the death of their companions*.

TURKIES are natives only of *America*, or the *New World*; and of course unknown to the antients. Since both these positions have been denied by some of the most eminent naturalists of the sixteenth century, I beg leave to lay open, in as few words as possible, the cause of their error.

Belon †, the earliest of those writers who are of opinion that these birds were natives of the old world, founds his notion on the description of the *Guinea Fowl*, the *Meleagrides* of *Strabo*, *Athenæus*, *Pliny*, and others of the antients. I rest the refutation on the excellent account given by *Athenæus*, taken from *Clytus Milesius*, a disciple of *Aristotle*, which can suit no other than that fowl. "They want," says he, "natural affection towards their young. Their head is naked, and on the top is a hard round body, like a peg or nail: from their cheeks hangs a red piece of flesh, like a beard: it has no wattles, like the common poultry: the feathers are black, spotted with white: they have no spurs: and both sexes are so like, as not to be distinguished by the sight." *Varro* ‡ and *Pliny* § take notice of the spotted plumage, and the gibbous substance on the head. *Athenæus* is more minute, and contradicts every character of the Turkey: whose females are remarkable for their natural affection; which differ materially in form from the males; whose heads are destitute of the callous substance; and whose heels (in the male) are armed with spurs.

PLACE.

MISTAKEN BY
BELON.

* *Du Prat*, 224.

† 248. *Hist. des Ois.*

‡ *Lib. iii. c. 9.*

§ *Lib. x. c. 26.*

ALDROVANDUS,

AND GESNER.

Aldrovandus, who died in 1605, draws his arguments from the same source as *Belon*; I therefore pass him by, and take notice of the greatest of our naturalists, GESNER *; who falls into a mistake of another kind, and wishes the Turkey to be thought a native of *India*. He quotes *Ælian* for that purpose; who tells us, "that in *India* are very large poultry, not with combs, but with various-colored crests, interwoven like flowers: with broad tails, neither bending, nor displayed in a circular form, which they draw along the ground, as Peacocks do when they do not erect them: and that the feathers are partly of a gold color, partly blue, and of an emerald color †.

This, in all probability, was the same bird with the Peacock Pheasant of Mr. *Edwards*, *Le Paon de Tibet* of M. *Briffon*, and the *Pavo Bicalcaratus* of *Linnaeus*. I have seen this bird living. It has a crest, but not so conspicuous as that described by *Ælian*; but it has those striking colors in form of eyes: neither does it erect its tail like the Peacock ‡. The *Catreus* of *Strabo* § seems to be the same bird. He describes it as uncommonly beautiful, and spotted; and very like a Peacock. The former author || gives a more minute account of this species, and under the same name. He borrows it from *Clitarchus*, an attendant of *Alexander the Great* in all his conquests. It is evident from his description, that it was of this kind; and it is likewise probable, that it was the same with his large *Indian* poultry before cited. He celebrates it also for its fine note; but allowance must be made for the credulity of *Ælian*. The *Catreus*, or Peacock Pheasant, is a native of *Tibet*, and in all probability of the north of *India*, where *Clitarchus* might have observed it; for the march of *Alexander* was through that part of *In-*

* *Av.* 481.
i. 291.—*Lin. Syst.* 268.
c. 23.

† *De Anim.* lib. xvi. c. 2.
§ *Lib.* xv. p. 1046.

‡ *Edw.* ii. 67.—*Briffon*,
|| *De Anim.* lib. xvii.

dia which borders on *Tibet*, and now known by the name of *Penj-ab*, or Five Rivers.

I shall now collect from authors the several parts of the world where Turkeys are unknown in the state of nature. *Europe* has no share in the question, it being generally agreed, that they are exotic in respect to our continent.

NOT NATIVES OF
EUROPE;

Neither are they found in any part of *Asia Minor*, or the *Asiatic Turkey*, notwithstanding ignorance of their true origin first led them to be named from that empire. About *Aleppo*, capital of *Syria*, they are only met with domesticated, like other poultry *. In *Armenia* they are unknown, as well as in *Persia*, having been brought from *Venice* by some *Armenian* merchants into that empire †; where they are still so scarce, as to be preserved among other rare fowls in the Royal menagerie ‡.

NOR OF ASIA;

In *India* they are kept for use in our settlements, and imported from *Europe*, as I have been more than once informed by gentlemen long resident in that country.

Du Halde acquaints us, that they are not natives of *China*; but were introduced there from other countries. He errs, from misinformation, in saying that they are common in *India*.

I will not quote *Gemelli Careri*, to prove that they are not found in the *Philippine* islands, because that gentleman, with his pen, travelled round the world in his easy chair, during a very long indisposition and confinement §.

But *Dampier* bears witness that none are found in *Mindanao* ||.

The hot climate of *Africa* barely suffers these birds to exist in that vast continent, except under the care of mankind. Very few are found in *Guinea*, except in the hands of the *Europeans*: the ne-

NOR AFRICA;

* *Russell*, 63.

† *Tavernier*, 146.

‡ *Bell's Travels*, i. 128.

§ *Sir James Porter's Obs. Turkey*, i. 1.

|| *L. 321.*

groes declining to breed any, on account of their great tenderness*.

Prosper Alpinus satisfies us that they are not found either in *Nubia* or in *Egypt*. He describes the *Meleagrides* of the antients; and only proves that the *Guinea*-hens were brought out of *Nubia*, and sold at a great price at *Cairo* †, but is totally silent about the Turkey of the moderns.

Let me in this place observe, that the *Guinea*-hens have long been imported into *Britain*. They were cultivated in our farmyards: for I discover, in 1277, in the grainge of *Clifton*, in the parish of *Ambrosden*, in *Buckinghamshire*, among other articles, vi. *mutilones*, and sex *AFRICANÆ feminae* ‡; for this fowl was familiarly known by the names of *Afra Avis*, and *Gallina Africana & Numida*. It was introduced into *Italy* from *Africa*, and from *Rome* into our country. They were neglected here by reason of their tenderness and difficulty of rearing. We do not find them in the bills of fare of our antient feasts §: neither do we find the Turkey: which last argument amounts to almost a certainty, that such a hardy and princely bird had not found its way to us. The other likewise was then known here by its classical name; for that judicious writer, *Dr. Caius* ||, describes, in the beginning of the reign of *Elizabeth*, the *Guinea* fowl, for the benefit of his friend *Gesner*, under the name of *Meleagris*, bestowed on it by *Aristotle* ¶.

Having denied, on the very best authorities, that the Turkey ever existed as a native of the old world, I must now bring my proofs

* *Barbot*, in *Churchill's Coll.* v. 29.—*Bozman*, 229.
Ægypti, i. 201.

† *Hist. Nat.*

‡ *Kenner's Parochial Antiq.* 287.

§ Neither in that of *George Nevil*, archbishop of *York*, in 1466, nor among the delicacies mentioned in the *Northumberland Household Book*, in the beginning of the reign of *Henry VIII.*

|| *Caii Opusc.* 93.

¶ *Hist. An. lib. vi. c. 2.*

of its being only a native of the new; and of the period in which it first made its appearance in *Europe*.

The first precise description of these birds is given by *Oviedo*; BUT OF AMERICA. who in 1525 drew up a summary of his greater work, the *History of the Indies*, for the use of his monarch *Charles V.* This learned man had visited the *West Indies* and its islands in person, and payed particular regard to the natural history. It appears from him, that the Turkey was in his days an inhabitant of the greater islands, and of the main land. He speaks of them as Peacocks; for, being a new bird to him, he adopts that name, from the resemblance he thought they bore to the former: "But (says he) the neck is bare of feathers, but covered with a skin which they change after their phantasia into divers colours. They have a horn as it were on their front, and HAIREs on the breast*." He describes other birds, which he also calls Peacocks. They are of the gallinaceous genus, and known by the name of *Curassao* birds; the male of which is black, the female ferruginous.

The next who speaks of them as natives of the main land of the warmer parts of *America*, is *Francisco Fernandez*, sent there by *Philip II.* to whom he was physician. This naturalist observed them in *Mexico*. We find by him, that the *Indian* name of the male was *Huexolest*, of the female *Cibuatotolin*: he gives them the title of *Gallus Indicus*, and *Gallo-Pavo*. As the *Indians* as well as *Spaniards* domesticated these useful birds, he speaks of the size by comparison, saying that the wild were twice the magnitude of the tame; and that they were shot with arrows or guns †. I cannot learn the time when *Fernandez* wrote. It must be between the years 1555 and 1598, the period of *Philip's* reign.

MEXICO.

Pedro de Cieza mentions *Turkies* on the Isthmus of *Darien* ‡.

DARIEN.

* In *Purchas*, iii. 995.
Years Travels, 20.

† *Hist. Av. Nov. Hisp.* 27.

‡ *Seventeen*

Lery,

Lery, a *Portuguese* author, asserts that they are found in *Brasil*, and gives them an *Indian* name *; but since I can discover no traces of them in that diligent and excellent naturalist *Marcgrave*, who resided long in that country, I must deny my assent. But the former is confirmed by that able and honest navigator *Dampier*, who saw them frequently, as well wild as tame, in the province of *Yucatan* †, now reckoned part of the kingdom of *Mexico*.

YUCATAN.

N. AMERICA.

In *North America* they were observed by the very first discoverers. When *René de Laudonniere*, patronized by Admiral *Coligini*, attempted to form a settlement near the place where *Charlestown* now stands, he met with them on his first landing, in 1564, and by his historian, has represented them with great fidelity in the Vth plate of the recital of his voyage ‡. From his time, the witnesses to their being natives of this continent are innumerable. They have been seen in flocks of hundreds in all parts, from *Louisiana* even to *Canada*: but at this time are extremely rare in a wild state, except in the more distant parts, where they are still found in vast abundance.

WHEN FIRST IN-
TRODUCTION INTO
EUROPE.

It was from *Mexico* or *Yucatan* that they were first introduced into *Europe*; for it is certain that they were imported into *England* as early as the year 1524, the 15th of *Henry VIII* §. We probably received them from *Spain*, with which we had great intercourse till about that time. They were most successfully cultivated in our kingdom from that period; inasmuch that they grew common in every farm-yard, and became even a dish in our rural feasts by

* In *De Laet's Descr. des Indes*, 491. † *Voyages*, vol. ii. part. 2d, p. 65, 85, 114. ‡ *De Bry*.

§ *Baker's Chr.* — *Anderson's Dict. Com.* i. 354. — *Hackluyt*, ii. 165, makes their introduction about the year 1532. *Barnaby Googe*, one of our early writers on husbandry, says they were not seen here before 1530. He highly commends a Lady *Hales*, of *Kent*, for her excellent management of these fowl. p. 166.

the

W I L D T U R K E Y.

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the year 1585; for we may certainly depend on the word of old *Tusser*, in his account of the *Christmas* husbandlie fare *.

Beefe, mutton, and porke, shred pies of the best,
Pig, veale, goose and capon, and *Turkie* well drest :
Cheefe, apples, and nuts, jolie carols to heare,
As then in the countrie, is counted good cheare.

But at this very time they were so rare in *France*, that we are told that the very first which was eaten in that kingdom appeared at the nuptial feast of *Charles IX.* in 1570 †.

They are now very common in all parts of *Russia*, but will not thrive in *Siberia*. Are cultivated in *Sweden* and even in *Norway*, where they degenerate in size ‡.

* *Five hundred pointes of good husbandrie*, p. 57.

† *Anderson's Diet. Comm.* i. 410.

‡ *Pentopp.* 78.

XVII. G R O U S.

XVII. GROUS. *Gen. Birds* XXXVI.

179. RUFFED.

Ruffed Heathcock, or Grouse, *Edw.* 248.—*Latham.*

Morehen, *La Hontan*, i. 69.

Pheasant, *Lawson*, 139.

Tetrao umbellus, *Lin. Syst.* 275.—*Tetrao togatus*, *ibid.*

La gelinote hupée de Pensylvanie, *Briffon*, i. 214.—and, La grosse gelinote de Canada—207.

Le Coq de Bruyere a fraise, *De Buffon, Ois.* ii. 281.—*Pl. Enl.* 104.—*LEV. Mus.*—*BL. Mus.*

GR. With a great ruff on the hind part of the neck, to be raised or depressed at pleasure: the head crested: that, hind part of the neck, the ruff, back, and coverts of the wings, prettily varied with brown, ferruginous, and black: the black on the ruff disposed in broad black bars: the coverts of the tail marked with heart-shaped spots of white: chin white: fore part of the neck yellowish: breast and belly dirty white, barred with cinereous brown: primaries barred on their outmost sides with black and rust-color.

Tail large, expansible like a fan; in some of a cinereous colour, in others orange, most elegantly barred with narrow undulated lines of black; near the end with a broad band of ash-color, another of black, and tipped with white.

Legs feathered to the feet: toes naked and pectinated.

Female wants both crest and ruff. Crown dusky: back mixed with black and rust-colour like a Woodcock: breast, belly, and coverts of the wings, barred with dirty white and cinereous brown: tail

RUFFED GROUSE.

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tail short, brown, tipped with white; two middle feathers mottled with red.

In size these birds observe a medium between a Pheasant and a Partridge. Length 1 foot 5 inches.

They inhabit *North America*, from *Hudson's Bay** to the *Carolinās*, and probably to *Louisiana*†.

The history of this species is very curious: all which I beg leave to transcribe from Mr. *Edwards*, according to the accounts given him by Mr. *Bartram* and Mr. *Brooke*, who had frequent opportunity of observing its manners; to which I shall add another, borrowed from the Travels of the Baron *La Hontan*.

"He is (says Mr. *Bartram*) a fine bird when his gaiety is displayed; that is, when he spreads his tail like that of a Turkey-cock, and erects a circle of feathers round his neck like a ruff, walking very stately with an even pace, and making a noise somewhat like a Turkey; at which time the hunter must fire immediately at him, or he flies away directly two or three hundred yards, before he settles on the ground. There is something very remarkable in what we call their thumping; which they do with their wings, by clapping them against their sides, as the hunters say. They stand upon an old fallen tree, that has lain many years on the ground, where they begin their strokes gradually, at about two seconds of time distant from one another, and repeat them quicker and quicker, until they make a noise like thunder at a distance; which continues, from the beginning, about a minute; then ceaseth for about six or eight minutes before it begins again. The sound is heard near half a mile, by which means they are dis-

SIZE.

PLACE.

MANNERS.

FROM MR. BAR-
TRAM.

* *Phil. Transf.* lxii. 393.

† The accounts given by *Bessu*, *Engl. ed.* i. 95. and by *Du Prat*, ii. are too slight for us to determine the species they mean. *Charlevoix*, in his account of *Canada*, vol. v. describes it very well.

R U F F E D G R O U S.

“ covered by the hunters, and many of them killed. I have shot
 “ many of them in this position; but never saw them thump, they
 “ mostly seeing me first, and so left off. They commonly exercise
 “ in thumping spring and fall, at about nine or ten in the morning,
 “ and four or five in the afternoon. Their food is chiefly berries
 “ and seeds of the country: their flesh is white, and choice
 “ food. I believe they breed but once a year, in the spring, and
 “ hatch twelve or fourteen at a brood; which keep in a company
 “ till the following spring. Many have attempted to raise the young
 “ ones, and to tame them; but to no purpose. When hatched
 “ under a hen, they escape into the woods soon after they are
 “ hatched, where they either find means to subsist, or perish.”

MR. BROOKE.

The history of this bird is thus further illustrated by Mr. Brooke of Maryland, in *North America*: “ The ruffed Grouse, or Pheasant,
 “ breeds in all parts of Maryland, some countries on the Eastern
 “ shore excepted. They lay their eggs in nests they make in the
 “ leaves, either by the side of fallen trees, or the roots of standing
 “ ones. They lay from twelve to sixteen eggs: the time of incubation
 “ is in the spring; but how long their eggs are hatching
 “ I cannot say; but probably it is three weeks, the time that a
 “ Dunghill Hen sits. I have found their nests when a boy, and
 “ have endeavoured to take the old Pheasant, but never could succeed:
 “ she would almost let me put my hand upon her before she
 “ would quit her nest; then by artifice she would draw me off
 “ from her eggs, by fluttering just before me for a hundred paces
 “ or more; so that I have been in constant hopes of taking her.
 “ They leave their nests as soon as they are hatched; and I believe
 “ they live at first on ants, small worms, &c. When they are a
 “ few days old, they hide themselves so artfully among the leaves,
 “ that it is difficult to find them: as they grow up, they feed on
 “ various berries, fruits, and grain of the country: grapes they
 “ likewise

" likewise are fond of in the season; but the Pheasant is more particularly fond of the ivy-berry. I do not know any other animal that feeds on this berry: I know it is poison to many. Though the Pheasant hatches many young at a time, and often sits twice a year, the great number and variety of Hawks in Maryland feeding on them, prevents their increasing fast. The beating of the Pheasant, as we term it, is a noise chiefly made in the spring of the year by the cock-bird; it may be distinctly heard a mile in a calm day; they swell their breasts like the Powting Pigeon, and beat with their wings, which make a noise not unlike a drum in sound; but the Pheasant shortens each sounding note, till they run one into another undistinguishably, like striking two empty bottles together."

In order to perfect, as far as I am able, the history of this bird, I shall give a quotation from Baron *La Hontan's Voyages to North America*, published in *English*, (vol. i. p. 67.) where he speaks of a bird found near the lakes of *Canada*, which, I think, can be no other than the above-described, though the names given them disagree.

LA HONTAN.

La Hontan says, " I went in company with some *Canadese* on purpose to see that fowl flap with its wings: believe me, this sight is one of the greatest curiosities in the world; for their flapping makes a noise much like a drum, for about the space of a minute; then the noise ceases for half a quarter of an hour; after which it begins again. By this noise we were directed to the place where the unfortunate More-hen sat, and found them upon rotten mossy trees. By flapping one wing against the other they mean to call their mates; and the humming noise that ensues thereupon may be heard half a quarter of a league. This they do in the months of *April*, *May*, *September*, and *October*; and, which is very remarkable, the More-hen never flaps in this

Z z 2

" manner



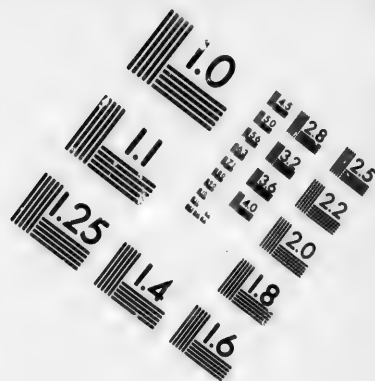
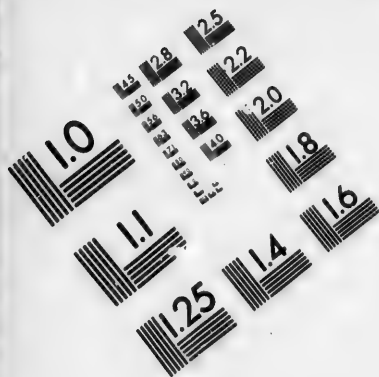
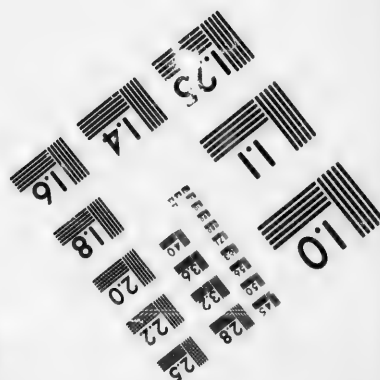
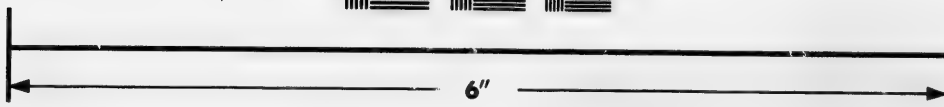
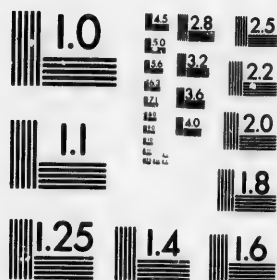


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"manner but upon one tree. It begins at break of day, and gives over at nine o'clock in the morning, till about an hour before sunset, then it flutters again, and continues so to do till night."

MR. GRAHAM.

To these accounts I beg leave to add the following, out of the *Philosophical Transactions*; which informs us, that this species of Grouse bears the *Indian* name of *Puskee*, or *Puspuskee*, at *Hudson's Bay*, on account of the leanness and dryness of their flesh, which is extremely white, and of a very close texture; but when well prepared, is excellent eating. They are pretty common at *Moose Fort* and *Henly House*; but are seldom seen at *Albany Fort*, or to the northward of the above places. In winter they feed upon juniper-tops, in summer on gooseberries, raspberries, currants, cranberries, &c. They are not migratory; staying all the year at *Moose Fort*: they build their nest on dry ground, hatch nine young at a time, to which the mother clucks as our common hens do; and, on the least appearance of danger, or in order to enjoy an agreeable degree of warmth, the young ones retire under the wings of their parent.

180. PINNATED.

Urogallus minor fuscus cervicis plumis alas imitantibus donata, Catelby, App. tab. i. Tetrao Cupido, Lin. Syst. 274.—Latham.

La Gelinote hupée d'Amerique, Brisson, i. 212.—LEV. MUS.—BL. MUS.

GR. With head, cheeks, and neck of a reddish brown, marked with dusky lines: chin and throat of a pale rusty brown: on the head is a small crest: on each side of the neck a most singular tuft (five feathers in each) gradually lengthening to the fifth, which is about three inches long: the upper feathers ferruginous and white; the lower black: back and scapulars black and pale rust-colour; the former spotted with white: breast and belly barred with white and pale brown: tail barred with pale brown and black.

Legs

SHARP-TAILED GROUS.

357

Legs covered with soft brown feathers: toes naked and pectinated.

SIZE of a Pheasant. A peculiar species, not to be confounded with the preceding*. Described from the real bird by Mr. *Catesby*; and by myself from the specimens in Mrs. *Blackburn's* cabinet, which were sent from the province of *Connecticut*. Is frequent about a hundred miles up *Albany* river, in *Hudson's Bay*.

SIZE.

The tufts, which distinguish this species from all others, are rooted high on the neck, not far from the hind part of the head. The bird has the power of erecting or dropping them at pleasure. When disturbed, it would spread them horizontally, like little wings; at other times let them fall on the sides of the neck †. It is probable, that they assist in running or flying, or perhaps both, as the real wings are very short, in proportion to the weight of the body. These appendages are peculiar to the cock, and almost the only difference between it and the hen.

PLACE.

Long-tailed Grouse, *Edw.* 118.—*Pb. Tr.* lxii.

Tetrao Phasianellus, *Lin. Syst.* 273.—*Latbam.*

Le Coq de Bruyeres à longue queue, de la Baye de *Hudson*, *Briffon*, *App.* 9.—*De Buffon*, ii. 286.

181. SHARP-TAILED.

GR. With the head, cheeks, and hind part of the neck, varied with reddish brown and black: the back and coverts of the tail of the same color: the scapulars and great coverts of the wings ferruginous, spotted with black, and great spots of white: primaries black, spotted with white: breast and sides white, elegantly marked with sagittal spots of black: belly white: tail short and

* The Comte *De Buffon*, ii. 282. falls into this mistake. † *Catesby*.

cuneiform;

cuneiform; the two middle feathers two inches longer than the others: the tail is of the same color with the back, only the exterior feathers are spotted with white: the legs are covered with soft and long feathers, extending over the pectinated toes, which would be otherwise naked.

SIZE.

The LENGTH of this species is seventeen inches: the EXTENT of wings twenty-four: WEIGHT two pounds.

PLACE.

Inhabits *Hudson's Bay*; and, according to Dr. *Mitchel*, the unfrequented parts of *Virginia*; but none have been brought over to *England* from any other place than the *Bay*.

Linnaeus confounds this with the Wood Grouse, or Cock of the Wood *. Comparison will shew with how little reason the Comte *De Buffon* † makes it to be the female of the next species, our Spotted Grouse. If the female of that was not ascertained, the difference in the form of the tail would be sufficient to establish a distinction; by which it approaches nearest to the *European Pheasant* of any bird in *North America*.

The *Indians* about *Hudson's Bay* call this species the *Au Kuskow*. It continues there the whole year; lives among the small larch bushes, and feeds, during winter, on the buds of that plant and the birch; in the summer, on all sorts of berries. The females lay from nine to thirteen eggs. The young, like others of this genus, run as soon as hatched, and make a puling noise like a chicken. They differ chiefly from the cock, in having less of the red naked skin over the eyes. The cock has a shrill crowing note, but not very loud. When disturbed, or while flying, it makes a repeated noise of *Cuck, cuck*; and makes a noise with the feathers of its tail like the cracking of a fan. The flesh of these birds is of a light brown color, plump, and very juicy.

* *Br. Zool.* i. N° 92. tab. xl.

† *Oif.* ii. 279.

Black and Spotted Heathcock (male) *Edw.* 118.

Brown and Spotted Heathcock (female) *Edw.* 71.

Tetrao Canadensis (male) *Lin. Syst.* 274.

Tetrao Canace (female) *Lin. Syst.* 275.—*Latham.*

La Gelinote de la Baye de Hudson, *Briffon*, i. 201. and the same, *App.* 10. (male.)

La Gelinote de Canada, *Briffon*, i. 203. tab. xx. fig. 1. 2. (m. and fem.)—*De Buffon*, ii. 279.—*Pl. Enl.* 131, 132.

182. SPOTTED.

GR. With a white spot before and behind each eye: head, neck, back, and coverts of the wings and tail, dusky brown, crossed with black: throat of a glossy black, bounded by a white line, commencing at the external corner of each eye: breast of the former color: belly white, marked with great black spots: tail black, external feathers tipped with orange: legs feathered: toes naked and pectinated.

The FEMALE is of a reddish brown, barred and spotted with black: belly of a dirty white, spotted with black: tail of a deep brown, barred with mottled bands of black; the tips of the exterior feathers orange.

FEMALE.

The WEIGHT is twenty-three ounces: LENGTH fifteen inches: EXTENT near two feet.

SIZE.

Inhabits *Hudson's Bay*, *Newfoundland*, and *Canada*. Is called by the *English* of *Hudson's Bay*, the *Wood Partridge*, from its living in pine woods. These birds are very stupid; so that they are often knocked down with a stick; and are usually caught by the natives with a noose fastened to a stake. In summer they are very palatable; for in that season they feed on berries. In winter they live on the shoots of the spruce-fir, which infects the flesh with a very disagreeable taste. If it is true, that this species lays but five eggs*, it is a strange exception to the prolific nature of the genus.

PLACE.

* *Pb. Tr.* lxii. 390.

White

183. WHITE.

White Partridge, *Edw.* 72.—*Ellis's Voy.* 37.

La Lagopede de la Baie de *Hudson*, *De Buffon*, ii. 276. tab. ix.—*Latham*.

La Gelinote blanche, *Briffon*, i. 216.—*Pl. Enl.*

Tetrao Lagopus, *fuecis* Snoripa, *Lappis* Cheruna, *Faun. Suec.* N° 203.

SUMMER
PLUMAGE.

GR. With a black bill: scarlet eye-brows, very large in the male, in the female far less conspicuous. Head, neck, and part of the back, coverts of the tail, and scapulars, deep orange, crossed with numerous dusky lines, and often marked with great blotches of white: belly, legs, and middle feathers of the tail, white: the rest of the tail dusky, tipped with white: the shafts of the quill feathers black: the legs and toes warty clad with a very thick and long coat of soft white feathers: the claws broad and flat, adapted for digging.

WINTER
PLUMAGE.DOUBLY
FEATHERED.

Such is the summer dress: in winter they change their color to white, or, more properly speaking, moult, and change their colored plumes for white ones. By a wonderful providence, every feather, except those of the wings and tail, becomes double; a downy one shooting out at the base of each, as expressed in the plate, which gives an additional protection against the cold. In the latter end of *February*, the summer plumage begins to appear first about the rump, in form of brown stumps*, the first rudiments of the coat they assume in the warm season, when each feather is single, suitable to the time. I ought to have observed before, that the SPOT-
TED GROUS also changes its single for double feathers at approach of winter, notwithstanding it undergoes no change of color.

SIZE.

The WEIGHT of this species is twenty-four ounces: its LENGTH sixteen inches and a quarter: EXTENT twenty-three.

PLACE.

These birds are met with round the globe, within and without

* *Drake's Voy.* ii. 9.

the *arctic* circle, and as high as *lat.* 72, in the countries round *Hudson's Bay*, and as low as *Newfoundland*; in *Norway*; perhaps in the N. of the *Russian* dominions in *Europe* *, and certainly in *Asia* all over *Siberia*, as far as *Kamtschatka*, and in the islands which lie between that country and *America*. Finally, they abound in *Lapland* and *Iceland*; and I repeat, with certainty, that *Norway* has supplied me with this species, which was sent to me by the late Mr. *Fleischer*, of *Copenhagen*, along with the lesser kind, which proved to be the same with the White Grouse of the *Alps*, and the *Ptarmigan* of the Highlands of *Scotland*. Each of the varieties of the *Norwegian* birds were in their summer dress; and differed most materially in size as well as color, the one being in all respects like the *American* kind: the lesser agreed in every point with that which I describe, N° 95, vol. i. of my *British Zoology*.

NORWAY.

The natives distinguish the kinds. The larger, which inhabits forests, is styled by them *Skorv Rype*, or the Wood Grouse; the lesser, which lives in the mountains, is called *Field Rype*, or the Mountain Grouse †. They all burrow under the snow; and form extensive walks beneath. There they feed, especially in *Lapland*, on the seeds of the dwarf birch ‡, and in the season on variety of berries of mountain plants. During winter they are taken and brought to *Bergen* by thousands; are half roasted, and put into firkins, and transported to other countries §.

NORWEGIANS
DISTINGUISH
TWO KINDS.

The lesser variety is not unknown in *America*. The sort here

* The feathers of the *Russian* kind, whichever it was, in early times, about *Pechora*, were an article of commerce, and were sold for two pence of their money per *Pood*, or 38 lb. *Purchas*, ii. 536.

† The *Russian* White Grouse inhabits indifferently woods, mountains, plains, and marshes. The *British* species or variety is in *Russia* about half the size of the *Siberian* kind.

‡ *Fl. Lap.* 268.

§ *Pontoppidan*, ii. 92.

WHITE GROUS.

described is found in amazing quantities, especially about *Hudson's Bay*, where they breed in all parts along the coasts, make their nests on dry ridges on the ground, and lay from nine to eleven eggs, powdered with black.

This is the only species of Grouse in *North America* to which Providence hath given that warm protection to its feet, evidently to secure them against the cold of their winter lodgings: and, as they are greatly sought after by Eagles, Owls, and other birds of prey, a fine provision is made for their safety, by the change of color, which renders them not to be distinguished from the snow they lie on.

Every morning they take a flight into the air directly upwards, to shake the snow from their wings and bodies. They feed in the mornings and evenings, and in the middle of the day bask in the sun. In the morning they call to one another with a loud note, interrupted; feeding in the intervals, and calling again.

In the beginning of *October*, they assemble in flocks of two hundred, and live much among the willows, the tops of which they eat; whence they are called *Willow Partridges*. About the beginning of *December* they appear in less plenty, retiring from the flats about the settlements on *Hudson's Bay* to the mountains, where in that month the snow is less deep than in the lowlands, to feed on cranberries and other berries*. In *Greenland* they resort in summer to the mountains for the sake of the crowberries†, which they eat even with the leaves of the plant. In winter they descend to the shores, where the winds sweep the snow off the rocks, and enable them to pick up a sustenance.

They are an excellent food, and much searched after by the *Europeans* in *Hudson's Bay*. They are generally as tame as chickens,

* *Drage's Voy.* i. 174.
64, 75.

† *Empetrum Nigrum*.—See *Crantz, Greenland* i.

especially

especially in a mild day: sometimes they are rather wild; but by being driven about, or shot at with powder, they grow so weary, by the short flights they take, as soon to become very tame again. Sometimes the hunters, when they see the birds likely to take a long flight, imitate the crying of a Hawk, which intimidates them so much, that they instantly settle. When the female is killed, the male can scarcely be forced from the body of its mate*.

The usual method of taking them is in nets made of twine, twenty feet square, fastened to four poles, and supported in front in a perpendicular direction with sticks. A long line is fastened to these props, the end of which is held by a person who lies concealed at a distance. Several people are then employed to drive the birds within reach of the net, which is then pulled down, and often covers at one haul fifty or seventy. At this time they are so plentiful, that ten thousand are taken for the use of the settlement from *November* to the end of *April*. In former days, they must have been infinitely more numerous; for *Sir Thomas Button* relates, that when he wintered there in 1612, he took eighteen hundred dozens of these and other fowl†: but this is a trifle to the success of *M. Jeremie*, who asserts, that there were eaten in one winter, between himself and seventy-nine others, ninety thousand Grouse, and twenty-five thousand Rabbits‡.

The *Laplanders* take them by forming a hedge with the boughs of birch-trees; leaving small openings at certain intervals, and hang in each a snare. The birds are tempted to come and feed on the buds or catkins of the birch; and whenever they endeavour to pass through the openings they are instantly caught.

* *Faun. Groenl.* p. 117.

† Quoted in *North-west Fox*, 228.

‡ *Recueil de Voy. au Nord.* iii. 344.

184. ROCK.

ROCK Gr. With a black line from the bill to the eye. In all other parts of the plumage of the same colors with the **WHITE**, N° 183; but inferior in size by one third.

Differs in nature. Feeds on the tops of small birch. Frequents only the dry rocky grounds, and the larch plains. Makes a singular snoring noise, with its neck stretched out, and seemingly with difficulty. Is very numerous in the northern parts of *Hudson's Bay* and never visits the southern end, except in very hard weather. Never takes shelter in the woods, but sits on the rocks, or burrows in the snow. Is inferior in goodness to the preceding.



A. **GREAT GROUS**, *Br. Zool.* i. N° 92.

Tetraonis alterum Genus, *Plinii*, lib. x. c. 22.

Tetrao urogallus Kjader, *Faun. Suec.* N° 200.—*Latham*.

La Tetras, ou le grand Coq de Bruyere, *De Buffon*, ii. 191. tab. v.—*Pl. Enl.* 73. 74.

MALE.

GR. With head, neck, and back crossed with slender lines of black and grey: upper part of the breast glossy green: tail black; the feathers on each side spotted with white: legs feathered: toes naked and pectinated. **LENGTH** two feet eight: **WEIGHT** sometimes fourteen pounds.

SIZE.

FEMALE.

Length of the female only two feet two: color ferruginous and black, disposed generally in bars.

Notwith-

Notwithstanding the opinions of *Linnaeus* and the Count *De Buffon*, this species is unknown in *North America*. Its most southerly habitation, as far as I can discover, is the *Archipelago*, it being found in the islands of *Crete* and of *Milo*. One was shot in the last, perched on a palm-tree, on whose fruit it probably fed. I suspect that it does not extend into *Asia Minor*; for Doctor *Russell* does not enumerate it among the *Syrian* birds. As the *Tetrao*, which *Athenaeus* * calls a sort of Pheasant, was found in the ancient *Media*, it may still be met with in the northern part of *Persia*. If *Aristotle* intends this species by the words *Tetrix* and *Ourax* †, it was likewise found in *Greece*; but he applies those names only to a bird which lays its eggs on the grassy ground, and says no more.

Pliny gives a far clearer description of the *Tetraones* of *Italy*. *Decet TETRAONAS suus nitor, absolutaque nigritia, in superciliis cocci rubor*. This certainly means only the cock of the *Black Grouse*; which is distinguished by the intense blackness and the brilliant gloss of its plumage, as well as by its scarlet eyebrows, which is common to it and the *Wood Grouse*; which last is the species described by the ancient naturalist; truly in some respects, hyperbolically in others. He says it is of the size of a *Vulture*, and not unlike it in color ‡. Both these assertions approach the truth; for the upper part of the body has a dusky or footy look, not unlike that of the *Vulture* of the *Alps*. But when he speaks of its being the heaviest bird next to the *Ostrich*, we see plainly he goes beyond all bounds.

It is a species found in most parts of the wooded and mountainous countries of *Europe*, and extends even to the arctic *Lapmark* §: is common in *Russia* and *Siberia*; in the last are found greater and lesser varieties. It is found even as far as *Kamtschatka*.

* *Lib. xiv. p. 654.*
c. 22.

§ *Leem's, 241.*

† *Hist. An. lib. vi. c. 1.*

‡ *Hist. Nat. lib. x.*

The GREAT GROUS is very easily tamed, if taken young, and is fed with corn. The males, in a domestic state, emit the same note all the year, which in a wild state they only use in the season of love. When a cock of this species is shot in the woods, its widows are heard to utter a note inexpressibly miserable at their loss. In the love season the females have been found so greatly overpowered with the all-ruling passion, as to lay themselves on the ground, soliciting the company of the males, with their usual note; and so intent on the expected joys, as to neglect their own safety so much, that the peasants have actually taken them up in their hands.—*Mr. Oedman.*

B. SPURIOUS GR. Tetrao Hybridus. Racklehane. *Roslagis Roslare, Faun. Suec.*
N° 201.

GR. With a spotted breast and forked tail. In size equal to the hen of the preceding. Is much scarcer, more timid, and its note very different.

The SPURIOUS GROUS, or *Racklebanen* of the *Swedes*, is a breed between the cock of the *Black Grouse*, and a female of the *Great Grouse*; its note partakes of both species. It is restless, constantly moving from tree to tree; is therefore hated by sportsmen, as it gives other birds notice of their approach. This variety is well figured by Doctor *Sparman*, in his *Museum Carlssonianum*, tab. xv.—P.

The cock of the Black Game has been known in *Sweden* to cover the common domestic Hen, which did produce a barren spurious breed.

C. BLACK

C. BLACK GROUS, *Br. Zool.* i. N° 93.

Tetrao 1st, *Plinii*.

Tetrao Tetrix, *Orre, Faun. Suec.* N° 202.

Le Petit Tetras, ou Coq de Bruyere a queue forchue, *De Buffon*, ii. 210.—*Pl. Enl.* 172, 173.

GR. With a white spot on the shoulders, and white vent feathers: rest of the plumage of a full black, glossed with blue: tail much forked, exterior feathers curling outwards. Weight near four pounds. Length one foot ten inches.

Female weighs but two pounds. The tail is slightly forked and short: the colors rust, black, and cinereous.

Inhabits *Europe*, as high as *Lapland*: extends over *Russia* and *Siberia*, as far as birch-trees grow, of the catkins and buds of which it is very fond. Feeds much on the *populus balsamifera**, which gives its flesh a fine flavor. In northern *Europe*, this and the last species live during summer on whortle-berries, and feed their young with gnats.

PLACE.

The BLACK GROUS in the winter-time fills its craw with the catkins of the birch, before it retires under the snow; and by this means can sustain life seven days without any other food.—*Mr. Oedman*.

In summer the males perch on trees, and animate the forests with their crowing. In winter they lie on the ground, become buried in the snows, and form walks beneath, in which they often continue forty days†. They are at present taken in snares; but in *Lapland* were formerly shot with arrows‡.

* The *Taccamabacca* of North America.—*Catesby*, i. 34. iv. 591.

† *Olaus Gent. Septentr. lib. xix. c. 13.*

‡ *Amer. Acad.*

During

PTARMIGAN GROUS.

During winter, there is at present a very singular way of taking the BLACK GROUS in *Siberia*. In the open forests of birch, a certain number of poles are placed horizontally on forked sticks: by way of allurement, small bundles of corn are placed on them; and not remote, are set certain tall baskets of a conic shape, with the broadest part uppermost: within the mouth is placed a small wheel, through which passes an axis fixed so nicely as to admit it to play very readily, and permit one side or the other, on the least touch, to drop down, and again recover its situation. The BLACK GROUS are soon attracted by the corn on the horizontal poles; first alight on them, and after a short repast fly to the baskets, attempt to settle on their tops, when the wheel drops sideways, and they fall headlong into the trap, which is sometimes found half full.

D. PTARMIGAN, *Br. Zool.* i. N° 95.

Tetrao Lagopus. Suecis Snoripa. Lappis Cheruna, Fann. Suec. N° 203.

Le Lagopede, *De Buffon*, ii. 264. tab. ix.

GR. With the head, neck, back, scapulars, and some of the coverts of the wings, marked with narrow lines of black, ash-color, and rust, intermixed with some white: wings and belly white: outmost feathers of the tail black; those of the middle cinereous, mottled with black, and tip with white. The male has a black spot between the bill and the eye; which in the female is scarcely visible. One which I weighed in *Scotland* was nineteen ounces. Another weighed by Mr. Ray, in the *Grisons* country, only fourteen. It regularly changes its colors at approach of winter.

Inhabits

REHUSAK GROUS.

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PLACE.

Inhabits *Greenland, Iceland, Lapland, all Scandinavia, and Russia*; but I believe does not extend to *Siberia* or *Kamtschatka*. This, from its haunts, is called by the *Norwegians, Fjælde Rype*, or Mountain Grouse. But in *Russia* it inhabits indifferently woods, mountains, plains, and marshes. Its feathers were formerly an article of commerce. It is taken among the *Laplanders*, by the same stratum as the WHITE GROUS, N° 183.

The *Greenlanders* catch it in nooses hung to a long line, drawn between two men, dropping them over the neck of this silly bird. They sometimes kill it with stones; but of late oftener by shooting. It is said, that when the female is killed the male unwillingly deserts the body*.

The *Greenlanders* eat it either dressed, or half rotten, or raw, with seals lard. The intestines, especially those next to the rump, and fresh drawn, are reckoned great delicacies. They also mix the contents with fresh train-oil and berries; a luxury frequent among these people. The skins make a warm and comfortable shirt, with the feathers placed next to the body. The women formerly used the black feathers of the tail as ornaments to their head-dresses.

E. REHUSAK, *Montin*, in *At. Physogr. Lund. i. 150.*

GR. With neck rust-colored, spotted with black: back and coverts of tail black, varied with rusty streaks: breast divided from the lower part of the neck by a dark shade: rest of the breast and vent white; the hen spotted with yellow: primaries white: tail black; end whitish: thighs white, with some rusty spots: legs

* *Faun. Groenl. p. 117.*

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feathered

feathered to the toes: toes naked, covered with large brown scales.
 SIZE of a small Hen.

PLACE.

Inhabits both the woods and alps of *Lapland*. Lays thirteen or fourteen reddish eggs, marked with large brown spots. When disturbed, flies away with a loud noise, like a coarse laugh. The *Keron*, or common Ptarmigan, on the contrary, is silent. The *Keron* inhabits the *Alps* only.

F. HAZEL GR. *Will. Orn.* 175.

Tetrao bonasia. Hiarpe, *Faun. Suec.* N° 204.

La Gelinotte, *De Buffon*, ii. 233. tab. vii.—*Pl. Enl.* 474, 475.

G R. With the chin black, bounded with white: head and upper part of the neck crossed with dusky and cinereous lines: behind each eye a white line: coverts of wings and scapulars spotted with black and rust-color: breast and belly white, marked with bright bay spots: feathers of the tail mottled with ash and black; and, except the two middlemost, crossed with a broad single bar of black: legs feathered half way down. FEMALE wants the black spot on the chin, and white stroke beyond the eyes. Its size superior to an *English* Partridge.

SIZE.

PLACE.

Inhabits the birch and hazel woods of many parts of *Europe*, as high as the diocese of *Drontheim*, and even *Lapland**; and is not unfrequent in the temperate parts. *Paulsen*† says that it migrates into the south of *Iceland* in *April*, and departs in *September*? It lays from twelve to twenty eggs: perches usually in the midst of a tree: is attracted by a pipe, imitative of its voice, to the nets of the

* *Scheffer* *Lapl.* 138.

† *Catalogue of Iceland Birds*, MS.

sportsmen,

HAZEL GROUS.

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sportsmen, who lie concealed in a hovel *. Is excellent meat, in-
somuch that the *Hungarians* call it *Tschasarmadar*, or the bird of
Cæsar, as if it was only fit for the table of the Emperor. Is found
in most parts of the *Russian* dominions with the *Ptarmigan*, but grows
scarcer towards the east of *Siberia*.

* *Gesner Av.* 230.

XVII. PARTRIDGE. *Gen. Birds, XXXVII.*

185. MARYLAND. *American Partridge, Clayton, Pb. Tr. abridg. iii. 590.—Lawson, 140.—Catesby, App. plate xii.—Du Pratz, ii. 86.*
Tetrao Virginianus, Lin. Syst. 277.
Le Perdrix d'Amerique, Brisson, i. 231.—Et de la Nouvelle Angleterre, 229.—De Buffon, ii. 447.

P With white cheeks and throat, bounded by a line of black on all sides, and marked with another passing beneath each eye: breast whitish, prettily marked with semicircular spots of black: upper part of the breast, coverts of wings, scapulars, and coverts of tail, bright bay, edged with small black and white spots: scapulars striped with yellowish white: primaries and tail of a light ash-color.

The head of the female agrees in the white marks of the male, but the boundaries are ferruginous. There is also more red on the breast. In other respects the colors nearly correspond. In SIZE, above half as big again as the *English Quail*.

PLACE.

Frequent from *Canada* to the most southern parts of *North America*, perhaps to *Mexico*. Are great breeders, and are seen in covies of four or five and twenty. Breed the latter end of *April*, or beginning of *May*. Collect, towards the beginning of *June*, in great flocks, and take to the orchards, where they perch when disturbed. Feed much on buck-wheat; grow fat, and are excellent meat. Migrate from *Nova Scotia*, at approach of winter, to the southern provinces; but numbers reside in the latter the whole year. The males have a note twice repeated, which they emit, while the females are sitting,

COMMON PARTRIDGE.

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sitting, usually perched on a rail or gate. Make a vast noise with the wings when they arise.

Of late they have been introduced into *Jamaica*; are naturalized to the climate, and increase greatly in a wild state; and, as I am informed, breed in that warm climate twice in the year.

IN JAMAICA.



- A. COMMON PARTRIDGE. Tetrao Perdix. Rapphona. Faun. Suec. N° 205.
La Perdrix Grise, De Buffon, ii. 401.—Pl. Enl. 27.

INHABITS as high as *Sweden*; but has not yet reached *Norway* *. Found in the west, and all the temperate parts of *Russia* and *Siberia*, and even beyond lake *Baikal*, where it winters about steep rocky mountains exposed to the sun, and where the snow lies left.

During winter, in *Sweden* it burrows beneath the snow; and the whole covey retires there, leaving a spiracle at each end of their lodge.

* Brunnich, N° 201.

B. QUAIL,

B. QUAIL, *Er. Zool.* i. N° 97.—*Wachtel*, *Faun. Suec.* N° 206.—*LEV. MUS.*—*BL. MUS.*

IS found no further north than *Sweden*. It appears there in the beginning of the *leafing month* (*May*); and is neither heard or seen there in autumn or winter, unless it should, as *Linnaeus* supposes, migrate to the southern province, or *Schonen*, or retire to the *Ukraine*, *Wallachia*, &c *.

Quails swarm so greatly, at the time of their migration, about the *Dniper*, and in the south of *Russia*, that they are caught by thousands, and sent to *Moscow* and *Petersburgh* in casks. They are common in all parts of *Great Tartary*; but in *Siberia* only in the south, as their passage is hindered by the lofty snowy mountains. It is said they winter beneath the snow; and in great frosts, to be found torpid in the *Ant-hills*. Beyond lake *Baikal*, the quails exactly resemble those of *Europe*, but are quite mute. These are used by the *Chinese* in fighting, as we do Cocks.

* *Amaz. Acad.* iv. 592.

XVIII. B U S T A R D. *Gen. Birds, XXXIX.*

I Am sorry that I have it not in my power to do more than ascertain that a bird of the BUSTARD genus is found in *North America*. Captain KING was so obliging as to inform me, that he saw on the plains near *Norton Sound*, N. lat. $64\frac{1}{2}$, great flocks of a large kind. They were very shy; ran very fast, and for a considerable way before they took wing; so that he never could get one shot.

I often meet with the word *Outarde*, or *Bustard*, among the *French* voyagers in *North America*; but believe it to be always applied to a species of Goose.

The Great Bustard, *Br. Zool. i. N° 98*, is frequent over all the desert of *Tartary*, and beyond lake *Baikal*. Is a solitary bird; but collects into small flocks at the time of its southern migration, and winters about *Astracan* *.

186. NORTON
SOUND.



A. LESSER BUSTARD, *Br. Zool. i. N° 99.*

Tetrao Tetrax, Faun. Suec. N° 196.

La Petite Outarde, ou la Cane-petiere, De Buffon, ii. 40.—Pl. Enl. 10. 25.—LEV. Mus.

B. With crown, back, scapulars, and coverts of the wings, ferruginous and black; primaries black at their ends, white at their bottoms; the secondaries quite white: neck black, marked

* *Extraits, 143.*

LESSER BUSTARD.

near the top and bottom with a white circle : breast and belly white : middle feathers of the tail crossed with rust and black, the rest white. FEMALE entirely ferruginous and black, except wings and belly. Size of a Pheasant.

PLACE.

Appears in *Sweden* rarely in the spring : not traced further north. Very frequent in the southern and south-west plains of *Russia*, and in small flocks when it migrates. Continues a good way into the deserts of *Tartary* ; but is never seen in *Siberia*.

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